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THE POCKET BOOK OF BABY AND CHILD CARE

by BENJAMIN SPOCK, M. D.



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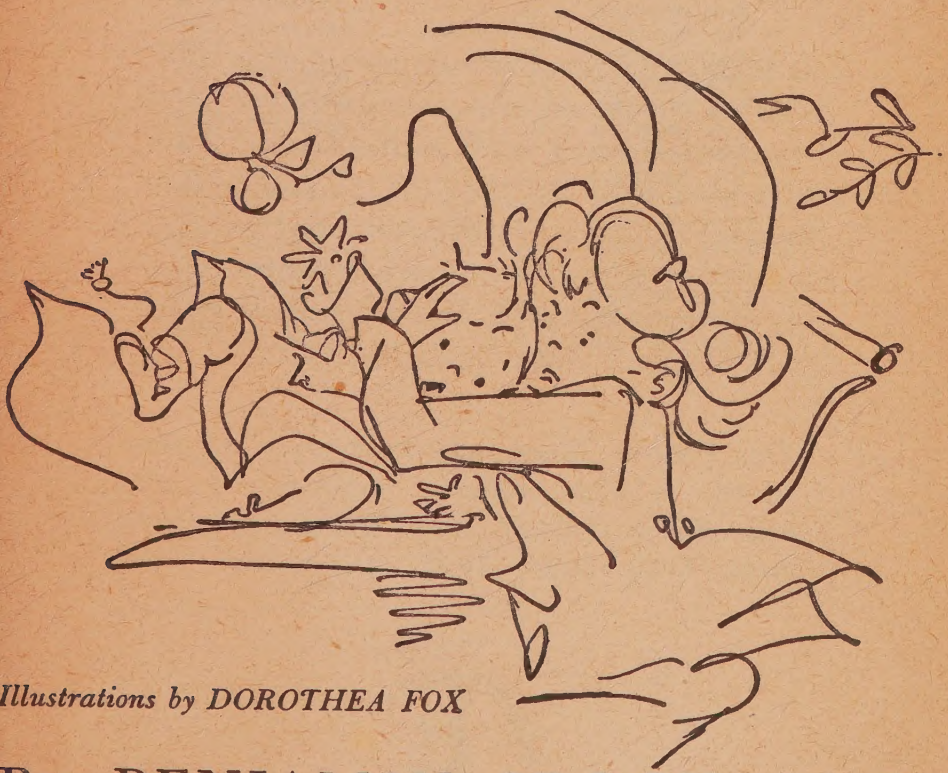
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BABY and CHILD CARE



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By BENJAMIN SPOCK, M. D.

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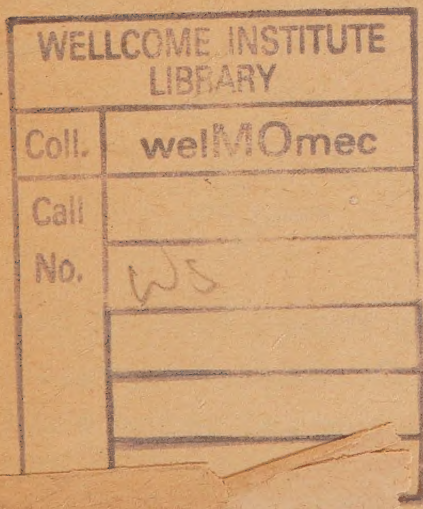
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—*New York Times*



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To Jane

A Letter to the Mother and Father

There are four things that I want to explain before you start reading. The topics are arranged to correspond to your baby's age. You can read along bit by bit, as he grows older, and find answers to the questions that naturally come up. You don't have to read the whole book ahead of time. Thumb-sucking, for instance, is taken up early, because most babies who ever suck their thumbs try to do it before they are 3 months old. But when I get started telling you about thumb-sucking, I want also to tell you about it in the older child, so that the subject won't be chopped up into little pieces in different parts of the book. Toward the end of the book are the topics like measles and first aid that don't belong to any one age period. When your child gets spots or a burn, you'll expect to look it up in the Index anyway. Use the Index at the back when you are troubled. It's arranged to help you find the answers. Under "Stomach-Ache" it will tell you all the places in the book where stomach-ache is mentioned.

Some sections of this book ("Formulas," "Adding Solid Foods," for instance) give definite directions for the benefit of those families who are unable to consult a doctor regularly because they live far away and out of reach. Caring for children with only the help of a book is not satisfactory, but it is better than nothing. Parents who are able to get medical advice by visit and by telephone should always turn to their doctor, not only when a child is not doing well, but for all specific directions about formulas, vitamins, etc. The doctor who knows at first hand how a baby is doing is the only one in a sound position to prescribe a formula for him. By glancing at a rash or by asking the mother one question over the telephone, he can usually get

to the solution of a problem about which the parents would only get more mixed up by reading.

I want to apologize to half the fathers and mothers who are going to read the book. I mean the parents whose first baby is a girl. Everywhere I've called the baby "him." I think girl babies are as wonderful as boy babies. But in every sentence I can't say "her or him" and I can't say "it" (parents would rather have their baby called by the wrong sex than be called "it"). Why can't I call the baby "her" in at least half the book? I need "her" to refer to the mother. I hope the parents of girls will understand and forgive me.

Last of all I want to urge you not to worry or decide that you've made a mistake with your child on the basis of anything that you read in this book (or anywhere else, for that matter). In the first place, we don't know all the answers yet. Our ideas about how to treat a child have changed a lot in the past and will certainly change in the future. This book only tries to give you sensible present-day ideas of the care of a child, taking into account his physical and emotional needs. It's not infallible.

The other reason you mustn't take *too* seriously anything that you read is that books deal in generalities. They can't go into all the possible variations. If I write that most babies begin to have dry diapers around 15 months of age, you mustn't jump to the conclusion that your child of 18 months is abnormal because he's always wet. If I mention several kinds of nervousness that I think help to cause stuttering, I don't mean for a minute that every child who stutters *must* be suffering from one of them. The book is meant to be a source of helpful general suggestions, not the final word.

Preparing for the Baby

TRUST YOURSELF

1. You know more than you think you do. Soon you're going to have a baby. Maybe you have him already. You're happy and excited, but, if you haven't had much experience, you wonder whether you are going to know how to do a good job. Lately you have been listening more carefully to your friends and relatives when they talked about bringing up a child. You've begun to read articles by experts in the magazines and newspapers. After the baby is born, the doctor and nurses will begin to give you instructions, too. Sometimes it sounds like a very complicated business. You find out all the vitamins a baby needs and all the inoculations. One mother tells you you must use the black kind of nipples, another says the yellow. You hear that a baby must be handled as little as possible, and that a baby must be cuddled plenty; that spinach is the most valuable vegetable, that spinach is a worthless vegetable; that fairy tales make children nervous, and that fairy tales are a wholesome outlet.

Don't take too seriously all that the neighbors say. Don't be overawed by what the experts say. Don't be afraid to trust your own common sense. Bringing up your child won't be a complicated job if you take it easy, trust your own instincts, and follow the directions that your doctor gives you. We know for a fact that the natural loving care that kindly parents give to their children is a hundred times more valuable than their knowing how to pin a diaper on just right, or making a formula expertly. Every time you pick your baby up, even if you do it a little awkwardly at first, every time you change him, bathe him, feed him, smile at him, he's getting a feeling that he belongs to you and that you belong to him. Nobody else in the world, no matter how skillful, can give that to him.

It may surprise you to hear that the more people have studied different methods of bringing up children the more they have come to the conclusion that what good mothers and fathers instinctively feel like doing for their babies is usually best after all. Furthermore, all parents do their best job when they have a natural, easy confidence in themselves. Better to make a few mistakes from being natural than to do everything letter-perfect out of a feeling of worry.

THINGS YOU'LL NEED

2. Getting things ahead of time. Some women don't feel like buying anything until they have their baby. But the advantage of getting and arranging everything ahead of time is that it lightens the burden later. A certain number of mothers feel tired and easily discouraged at the time when they begin taking care of the baby themselves. Then a little job like buying half a dozen nipples looms up like a real ordeal. Mothers who have gotten depressed have said to me afterwards, "The next time I'm going to buy everything that I need way ahead. Every toothpick and nightie is going to be in its place."

What do you really have to have, in the way of equipment, to take care of a new baby? There are no exact rules, but here are some suggestions.

3. A place to sleep. You may want to get a beautiful bassinet, lined with silk. But the baby doesn't care. All he needs is sides to keep him from rolling out, and something soft but firm in the bottom for a mattress. A crib, a clothes- or market basket, a box, or a bureau drawer will do. Mattresses made of hair keep their shape best, but they are more expensive. (Occasionally hair, principally pig's hair, causes allergy in a susceptible child. This risk can be avoided by enclosing the mattress in an airtight casing specially made for this purpose.) You can make a mattress by folding up an old blanket and tufting it. Don't use a soft pillow for a mattress. It's not flat enough. The sides of a small bassinet will probably have to be padded to keep the baby from hurting his hands. He doesn't need a pillow for his head, and it's better not to use one.

Waterproof sheeting. Large enough to cover the mattress. It is more convenient to have two sheets so that one can be washed

and dried at leisure. A plastic material that can be boiled helps to avoid diaper rash.

Pads. Over the waterproof material goes a pad. This is to absorb moisture and allow some circulation of air under the baby's body; otherwise the skin stays too hot and wet. The number of pads you will need will depend on how often the laundry is done, how much the baby wets, how much he spits up. You will need three anyway, and six are more convenient.

Sheets. You will need three to six sheets. If you are using a small bassinet at first, you can use diapers for sheets. For anything larger, the best sheets are made of cotton stockinet. They are easy to wash, quick to dry, spread smoothly without ironing, and do not feel clammy when wet.

Blankets. The number of blankets depends on climate and season. It is better to have lightweight blankets (best of all are knit shawls, next best light flannel), because they wrap around the baby more easily when he is out of the crib and because you can adjust the amount of covering to the temperature. It is best to have most of the blankets made of all wool for cold climates, so that the covering will not be too heavy. Cotton flannel "receiving blankets" are not essential, but they are helpful for wrapping around the baby who would otherwise kick off his outer bed coverings, or for the baby who feels comfortable and secure only when he is very snugly bundled.

4. Something to bathe him in and dress him on. A folding, fabric bathtub is a great convenience. The tub part is made of waterproof material hung from a frame on high legs. It is high enough so that you don't break your back bathing the baby. When the bath is finished, a flat canvas top covers the tub, and on this the baby can be dried, dressed, and changed. Of course the baby can be bathed in an enamel-ware tub, a dishpan, or washstand. If you don't have a folding tub, you can bathe and dress the baby on a low table, at which you sit, or on the top of a fairly high bureau, at which you stand.

5. The Clothes He Needs

Nightgowns. Stockinet nightgowns are comfortable, practical, and require no ironing. The long ones make it harder for

the baby to kick his coverings off. You will need three to six. Get the one-year size to start with.

Shirts. Most shirts nowadays are made without buttons or tapes, and these are handier. For most babies cotton shirts that can be boiled and that do not provide too much warmth in a warm room are best. If a baby is thin and frail, or if he lives always in a cold house, there is more point in shirts made partly of wool. I'd get long-sleeved shirts, because if a baby needs any covering, he needs it on his arms, too. You will need three to six shirts, one-year size.

Diapers. The most popular materials for diapers are gauze and bird's-eye. The gauze diapers are more absorbent and quicker drying. Two dozen will cover your needs if you wash them every day and don't use too many for sheets, towels, etc. Six dozen will cover all possible needs. Get the large size. If you live in a city which has a diaper service, you will probably want to subscribe to this if you can afford it. It saves time, effort, and drying space. The company supplies the diapers, as well as launders them.

Sweaters and sacks. Get them too big rather than too small. The opening for the head needs to be large, so that you don't make the baby frantic getting a sweater off and on. Better a shoulder opening with buttons.

Other clothes. Knitted wool caps are all right for going outdoors in the kind of weather that makes grownups put on overcoats, or for sleeping in an equally cold room. For milder weather caps are unnecessary; most babies don't like them, anyway. You don't need booties and stockings, at least until your baby is sitting up and playing around in a cold house. Dresses make a baby look pretty, but are unnecessary otherwise, and bothersome to the baby and the mother.

6. Bottles and Other Equipment

Nursing bottles. If you know ahead of time that you are not going to breast-feed the baby, buy at least nine 8-ounce bottles. You will use six a day in the beginning for the formula, and you will surely break a few eventually. Heat-resistant bottles cost a little more, but you save on breakage in the end. Better buy round or octagonal bottles, because the racks in sterilizers are

built for this shape. You can use the 8-ounce bottles also for juice and water; but if you get 4-ounce bottles, there is extra space left in the sterilizer for funnel, nipple jar, etc. You might get four of these.

Nipples. The exact size and shape of the rubber nipple does not usually make much difference, though you may find from experience that one works better than another with your baby. Get at least nine medium-sized nipples to start with. A few extra will come in handy in case you drop one on the floor or are having trouble making the nipple holes the right size.

Glass nipple covers, or bottle caps. Nine of either. There are at least three good ways to cap the bottles between filling them and feeding them. Most convenient for many mothers is to put the nipples on the bottles as soon as they are filled and then put on nipple covers. These look like miniature drinking glasses and fit over the nipples. Another method is to leave the nipples in the nipple jar until feeding time, and meanwhile cover the bottle necks with caps. There are rubber ones that you sterilize daily, and there are paper ones that you throw away each time. A third method is for special bottles that have large, plastic, screw-on caps. The nipple, which is of a special shape, is stored upside down in the neck of the bottle and held in place by the cap until feeding time.

Funnel to get the formula into the narrow-mouthed nursing bottles.

Strainer, small and fine.

Measuring tablespoon and teaspoon.

Bottle brush and nipple brush.

Can opener (for evaporated milk).

Nipple jar and cover with wide mouth, that fits in sterilizer. A jelly jar is a good size. Punch some holes in the cover to let the steam in during sterilizing.

Tongs or forceps strong enough to lift the bottles out of the sterilizer, small enough to fit in the sterilizer during boiling.

Quart measure of enamel ware, to measure, mix, and boil the formula in. It should have ounce markings on the inside. Or you can do your mixing and boiling in a saucepan or double boiler, and measure with a measuring cup marked in ounces. The quart measure method is quicker and easier.

Sterilizer and rack. You can sterilize in any pan that is large enough to hold the bottles, nipple jar, nipple covers, funnel, strainer, and tongs, or in two or three smaller pans. You can do the job much more easily and quickly if you have a straight-sided pail at least 8 inches tall, 9 inches in diameter, that holds an eight-bottle rack. It should have a handle, and a cover with a handle. I would advise getting the pail and rack. Economize somewhere else.

Convenient but more expensive is a pressure steam-sterilizer. The cover clamps on tight, only a small amount of water is boiled in the bottom. The steam under pressure sterilizes quickly. There are also electric sterilizers which make it unnecessary to do the job in the kitchen.

Bath thermometer. Not necessary, but a comfort to the inexperienced mother.

Rectal thermometer.

Absorbent cotton. A pound roll of sterile absorbent cotton.

Toothpicks or toothpick swabs. You can make your own cotton swabs, for cleaning dirt out of the opening of the nose, or applying medicine, by wrapping a little cotton around the dull end of a toothpick. Or you can buy prepared swabs.

Zinc ointment. In tube or jar, to protect the skin when there is a diaper rash.

Baby oil. Not really necessary unless the skin is dry. Mineral oil (liquid petrolatum), or a commercial preparation.

Baby powder. Helps a little to avoid chafing, but it is not necessary in most cases. Zinc stearate powder is not considered safe for babies, because it is irritating when breathed into the lungs.

Cod-liver oil or some other vitamin D preparation. Ask your doctor which one to get.

Soap. Any mild, pure soap is satisfactory.

Bottle warmer. The baby's bottle can, of course, be warmed in any kind of container. An electric warmer is very handy when the hot-water supply is undependable.

Diaper pail. This should hold 3 gallons, be nonrusting and have a cover. It is more convenient to have two, one for wet and one for soiled diapers. If you are going to use a diaper service, they will provide a container.

Scales. If a baby is doing well and going to see his doctor regularly, there is no real need to have scales at home. On the other hand, if a baby cries a great deal and the mother can't tell whether it is from indigestion or hunger, a pair of scales will help a lot, especially if the doctor is far away. If a relative wants to give you scales or a friend offers to lend them, better take them. If you have to buy them yourself and can ill afford them, wait and see. Balance scales are *much* more accurate and helpful than spring scales.

A carriage, unless the baby can sleep outdoors in something else. Be sure it pushes straight and easily if you have far to wheel him. Very small wheels are difficult on curbs. Carriages with very large wheels usually have axles close together and are tippy when the baby begins to climb around.

HELP AND MEDICAL CARE

7. Arranging for extra help in the beginning. If you can figure out a way to get someone to help you the first few weeks you are taking care of the baby, by all means do so. If you try to do everything by yourself and get exhausted, you will *have* to get help and have it for longer in the end. Besides, getting tired and depressed starts you and the baby off on the wrong foot.

Your mother may be the ideal helper, if you get along with her easily. If you feel she is bossy and still treats you like a child, this is not the time to have her. You will want to feel that the baby is your own and that you are doing a good job with him. It will help to have a person who has taken care of babies before, but it's most important of all to have someone that you enjoy having around.

If you can afford to hire a houseworker or a practical baby nurse for a few weeks, there will be the advantage over a relative that you can let her go if she doesn't work out right. In one way a houseworker is best—the mother can have the satisfaction of taking complete care of her baby from the start. Next best is a practical nurse who will do part of the housework, who is willing to fit in with your way of doing things, who will let you feel that the baby is yours, and who has a relaxed, agreeable personality. If you find that you have a nurse that you can't

stand, for goodness' sake get rid of her right away and take a chance on finding a better one.

How long should you engage a helper for? It will depend, of course, on your finances, on your desire to take over, and on your strength. Each day as your strength increases, take over a little more of the work. If, when two weeks is nearly up, you find that you still get tired easily, then by all means keep the helper, whether you can really afford her or not. She is not a luxury, under these circumstances, but a necessity. If you take over before you are strong enough, it will cost more in the end, financially and spiritually, than if you keep her on for another week or two.

Most expectant mothers feel a little scared at the prospect of taking sole charge of a helpless baby for the first time. If you have this feeling, it doesn't mean that you won't be able to do a good job, or that you *have* to have a nurse to show you how. But if you feel *really* panicky, you will probably learn more comfortably with an agreeable practical nurse.

If you can't get regular help, for one reason or another, try to get a visiting nurse to come in, in the early days. She will make the formula and bathe the baby at first and, as you get stronger, she will teach you how to do these things. There is a visiting nurse association in most cities and in many country districts. Ask the doctor or the nurse in the hospital, or telephone the visiting nurse office or local health department, or write the state health department.

8. A doctor for your baby. The way to be sure that your baby is doing well is to have him checked by a doctor regularly. The visits should be once a month in the early months, and at least once every 3 months during the second year. The doctor will want to weigh the baby to see how he's gaining, examine him to see that he's developing well and that he's not getting rickets or any other deficiency disease. Later there will be inoculations. The mother will have five or ten questions that she wants to ask, with her first baby anyway. It's a good idea to have a little notebook that's always handy for writing down questions when they come to your mind at home, and also for noting developments, such as teething or a rash, that you may want to know the date of later. Of course, some families live so far away from a doctor

that they can't plan to visit him monthly. In some cases the mother and doctor can keep in touch by telephone. Naturally, every baby won't get into trouble just because his doctor doesn't see him regularly. But experience has shown that the monthly visit is vitally important for the occasional baby who is not doing well and a worth-while and comforting precaution in all the rest.

Who's to be the doctor? In many cases the family physician who has delivered the baby will go on seeing him afterwards. A family doctor who is used to taking care of babies can do just as good a job as the specialist, unless some unusual problem comes up. In larger cities the mother may have been delivered by a specialist in obstetrics who doesn't take care of the baby afterwards. Then she will want to find a children's specialist (known as a pediatrician or pediatrist). One mother gets along best with a doctor who is casual, not too fussy about details. Another only feels right if she gets every direction down to the last period. If you have definite feelings about what kind of a doctor you want, discuss it with your obstetrician. He will know the children's specialists who are available.

Sometimes a doctor who specializes in delivering babies will agree to continue to supervise the baby's feeding for a certain number of weeks or months, as a convenience to the mother, and as part of the fee arrangement, though he plans to have another doctor take over eventually, sooner if illness develops. I think it is wiser, if the parents expect to have another doctor care for their child later, to call him in to take charge when the baby is born, or at least before he leaves the hospital. Feeding is only one of many aspects of the baby's total care during the first year. There are such matters as changes in the schedule, thumb-sucking, bowel function and training, the amount of attention and affection the baby needs, all of which are related to each other, and all of which should be considered together from the beginning in arranging his program. Then, too, the doctor who is called in to treat a baby's illness will be in a much better position to do it wisely if he has known him from birth.

A city baby whose parents can't regularly afford a private doctor can and should attend a "well-baby clinic" at a hospital or child-health station. Baby-health stations are being estab-

lished in many country districts, too. If you live in the country, write ahead of time to the state health department to find where the nearest clinic is. In a city you can find the nearest clinic by telephoning the city health department or the visiting nurse association.

If you live in a country region and can't take the baby to a private doctor or clinic regularly, you ought to find out from the state health department whether there is a visiting nurse or district nurse who can come in, once a month or so, to examine the baby and check his progress. If things aren't going well enough to suit her, she will advise you to see a doctor.

The Right Start

THE PARENTS' PART

9. Hospital impressions. Whether you have your baby at home or in a hospital depends mostly on where you and your doctor live. Doctors who are near hospitals and used to them usually prefer to deliver babies there for various practical reasons. But doctors who are used to home deliveries feel just as efficient there, as long as the case is not too complicated.

From the point of view of mother and baby, there are advantages in both places. The hospital has its staff of trained nurses, technicians, internes, and consultants all close at hand. It offers all the magical equipment like incubators and oxygen tents when emergencies arise. It makes the mother feel very safe and well cared for. But it has its mild drawbacks too, that are part and parcel of its virtues. It keeps the babies all together in a nursery at some distance from the mothers, so that they can be safe from the germs of too many people, can be well cared for by a few nurses, and won't disturb their mothers' rest. But it isn't quite natural, from the new mother's point of view, to have her baby somewhere else, and taken care of so completely

for a week or two by others. It may give her a feeling underneath of being somewhat ignorant and useless. A mother who has had several children might laugh at this and say, "It's *wonderful* to have that long rest in the hospital and not have to worry about the baby." But it's different for her; she has a lot of confidence in herself as a mother and takes the hospital in her stride.

The woman who has her baby at home can have him close by and feel that he is really hers right from the beginning. This is a nice start for both of them. She can nurse him at frequent intervals at first if that is necessary. She has her family and possessions around her. She doesn't have to wait for the visiting hour. All of these are real compensations.

A man, too, may get the wrong first impression of himself as a father when his baby is born in a hospital. The mother at least knows that she is the center of attention. The poor father is a complete outsider. He has to wait around alone for hours while the baby is being born, feeling useless and miserable. If he wants to see his baby, he has to stand outside a nursery window and look beseechingly at the nurse. Viewing a baby through glass is a poor substitute for holding him in the arms. Of course, the hospital is right in guarding his baby and all the others from any outside germs. But it gives the father the feeling that he is not considered a suitable companion for his child.

Both parents, I know, can get the wrong idea from the masks that are worn in many maternity hospitals. It makes them think of themselves as a menace to their baby. They wonder whether they ought not to be wearing them at home. The reason the masks are worn in hospitals is that so many adults and babies are gathered there in close quarters. A new germ brought in by anyone could spread easily and cause a lot of trouble. But in a family group there is very little risk of infection unless some member has a fresh cold or sore throat. Otherwise there is no need of masks.

Someday perhaps it will be possible to discover ways to change the arrangements of maternity hospitals so that they will still be safe and restful, and yet give fathers and mothers a little more chance, right from the beginning, to feel close and useful to their babies.

10. The father's part. Some fathers have been brought up to think that the care of babies and children is the mother's job entirely. This is the wrong idea. You can be a warm father and a real man at the same time.



The father is apt to get the mistaken idea that he's unimportant.

We know that the father's closeness and friendliness to his children will have a vital effect on their spirits and characters for the rest of their lives. So the time for him to begin being a real father is right at the start. That's the easiest time. The father and mother can learn together. In some cities, classes in

baby care are given for fathers too. If a father leaves it all to his wife for the first two years, she gets to be the expert and the boss, as far as the children are concerned. He'll feel more bashful about pushing his way into the picture later.

Of course, I don't mean that the father has to give just as many bottles or change just as many diapers as the mother. But it's fine for him to do these things occasionally. He might make the formula on Sunday. If the baby is on a 2 A.M. bottle in the early weeks, when the mother is still pretty tired, this is a good feeding for him to take over. It's nice for him, if he can, to go along to the doctor's office for the baby's regular visits. It gives him a chance to bring up those questions which are bothering him and of which he doesn't think his wife understands the importance. It pleases the doctor, too. Of course, there are some fathers who would get goose flesh at the very idea of helping to take care of a baby, and there's no good to be gained by trying to force them. Most of them come around to enjoying their children later "when they're more like real people." But many fathers are only a little bashful. They just need encouragement.

11. **The blue feeling.** It's possible that you will find yourself feeling discouraged for a while when you first begin taking care of your baby. It's a fairly common feeling, especially with the first. You may not be able to put your finger on anything that is definitely wrong. You just weep easily. Or you may feel very badly about certain things. One woman whose baby cries quite a bit feels sure that he has a real disease; another that her husband has become strange and distant; another that she has lost all her looks.

A feeling of depression may come on a few days after the baby is born or not till several weeks later. The commonest time is when a mother comes home from the hospital, where she has been waited on hand and foot, and abruptly takes over the full care of baby and household. It isn't just the work that gets her down. She may even have someone to do all the work, for the time being. It's the feeling of being responsible for the whole household again, plus the entirely new responsibility of the baby's care and safety. Then there are all the physical and glandular changes at the time of the birth, which probably upset the spirits to some degree.

The majority of mothers don't get enough discouraged in this period to ever call it depression. You may think it is a mistake to bring up unpleasant things that may never happen. The reason I mention it is that several mothers have told me afterwards, "I'm sure I wouldn't have been so depressed or discouraged if I had known how common this feeling is. Why, I thought that my whole outlook on life had changed for good and all." You can face a thing much better if you know that a lot of other people have gone through it too, and if you know that it's just temporary.

If you begin to feel at all depressed, try to get some relief from the constant care of the baby in the first month or two, especially if he cries a great deal. Go to a movie, or to the beauty parlor, or to get yourself a new hat or dress. Visit a good friend occasionally. Take the baby along if you can't find anyone to stay with him. Or get your old friends to come and see you. All of these are tonics. If you are depressed, you may not feel like doing these things. But if you make yourself, you will feel a lot better. And that's important for the baby and your husband as well as yourself. (The rare mother who becomes deeply depressed should have the help of a psychiatrist without delay.)

As for a mother's feeling, when she's blue, that her husband seems different, far away, there are two sides to it. On the one hand, anyone who is depressed feels that other people are less friendly and affectionate. But on the other hand, it's natural for a father, being human, to feel "put out" when his wife and the rest of the household are completely wrapped up in the baby. So it's a sort of vicious circle. The mother (as if she didn't have enough to do already!) has to remember to pay some attention to her husband. And she should give him every chance to share the care of the baby.

CIRCUMCISION

12. Circumcision and other ways to care for the penis. Should a baby boy be circumcised? If not, what care should be given the penis (the genital)? There's no one answer. There are three methods, each of which has its advantages.

Circumcision means the cutting off of the sleeve of skin (called the foreskin) which normally covers the head of the

penis. The advantages of circumcision are cleanliness and practicality. A cheese-like material called smegma is secreted by the skin of the head of the penis. When the foreskin remains, the smegma collects. Sometimes ordinary germs get into this smegma-filled space and cause an irritation or mild infection. If the foreskin has been removed, the smegma does not collect and there is no place for infection to occur. I think circumcision is a good idea, especially if most of the boys in the neighborhood are circumcised—then a boy feels "regular." However, it is not necessary. It is usually done in the second week, by the doctor who delivered the baby.

To protect the circumcision wound, put boric acid ointment on a single layer of gauze about the size of a large postage stamp and wrap it around the penis. A small pink blood stain discovered once or twice on the diaper is not important, but if bleeding persists, call the doctor.

Another way of taking care of the cleanliness of the penis is pulling back or "retracting" the foreskin every day or so in the bath. Some foreskins are loose enough at the opening so that they can be retracted easily. A majority, however, at the time of birth, have small, tight openings which make retraction difficult. The usual procedure is for the doctor in the hospital to force the foreskin back over the head of the penis, which stretches the opening. He then quickly draws the foreskin down again, over the head of the penis, and instructs the mother to retract it every day or every other day in the bath, and to briefly swab the collected smegma away. (A foreskin that has been retracted should always be pulled *all* the way down again into the normal position within a few seconds; otherwise the tightness will cut off the circulation in the head of the penis, cause it to swell, and make it more and more difficult to get the foreskin down.)

Retracting the foreskin has three minor disadvantages: (1) The mother shrinks from forcing it back in the early weeks when it has not become well stretched, because it hurts the baby a little. (2) Some people worry because they think it may be unwholesome to stimulate the penis so regularly. I don't believe a child is led into bad habits by a casual, brief handling of this kind, any more than he is later by handling his penis every

time he urinates. (3) The foreskin tends to form adhesions with the head of the penis unless it is retracted to the limit. If little pockets are left between the adhesions, smegma will collect, and irritating infections may occur.

The third method of care is to leave the foreskin alone. This is the simplest way and the one used throughout a great part of the world. Its disadvantages are the slight chance of an infection occurring under the foreskin, and the possibility, on this account, of having to circumcise at an age when the child might be worried by the operation.

The question of circumcision is often raised later in childhood, either because there has been an irritating infection beneath the foreskin, or because the child is masturbating. In the days before the importance of the child's emotions was recognized, it seemed logical to circumcise for either of these reasons. The parents or the doctor might say, "Maybe he's masturbating because there is discomfort from a little infection." The trouble is that this theory often puts the cart before the horse. We know now that sometimes a boy, especially between 3 and 6, becomes nervous about his penis, for fear some injury might happen to it (explained in Section 303). This worry may *cause* him to handle himself and produce a little irritation. If this should be the real sequence of events, you can see that an operation on the penis would be a bad thing for his fears.

The danger of psychological harm from circumcision is greatest between 1 and 6 years, but there is some risk up through adolescence. I think it's wise to avoid the operation if possible after the baby is a few months old, certainly as a treatment for masturbation. If it is advised for purely physical reasons, you might arrange a consultation with a psychiatrist so that the physical and psychological risks can be weighed against each other. (Section 338.)

ENJOY YOUR BABY

13. He isn't a schemer. He needs loving. You'd think from all you hear about babies demanding attention that they come into the world determined to get their parents under their thumbs by hook or by crook. This is not true at all. Your baby is born to be a reasonable, friendly human being. If you treat him nicely,

he won't take advantage of you. Don't be afraid to love him or respond to his needs. Every baby needs to be smiled at, talked to, played with, fondled—gently and lovingly—just as much as he needs vitamins and calories, and the baby who doesn't get any loving will grow up cold and unresponsive. When he cries it's for a good reason—maybe it's hunger, or wetness, or indigestion, or just because he's on edge and needs soothing. His cry is there to call you. The uneasy feeling you have when you hear him cry, the feeling that you want to comfort him, is meant to be part of your nature, too. A little gentle rocking may actually be good for him. There is more about crying in Section 101, playing in Section 89, spoiling in Section 90, overconcern in Section 259. Read *Babies Are Human Beings*, by C. Anderson Aldrich and Mary M. Aldrich.[1] Meanwhile, be natural and comfortable, and enjoy your baby.

14. **He doesn't have to be sternly trained.** You may hear people say that you have to get your baby strictly regulated in his feeding, sleeping, bowel movements, and other habits—but don't believe this either. In the first place, you can't get a baby regulated beyond a certain point, no matter how hard you try. In the second place, you are more apt, in the long run, to make him balky and disagreeable when you go at his training too hard. Everyone wants his child to turn out to be healthy in his habits and easy to live with. But each child wants, himself, to eat at sensible hours, and later to learn good table manners. His bowels (as long as the movements don't become too hard) will move according to their own healthy pattern, which may or may not be regular; and when he is much older and wiser, you can show him where to sit to move them. He will develop his own pattern of sleep, according to his own needs. In all these habits he will fit into the family's way of doing things sooner or later without much effort on your part.

The same thing goes, later on, for discipline, good behavior, and pleasant manners. You can't drill these into a child from the outside in a hundred years. The desire to get along with other people happily and considerately develops within him as part of the unfolding of his nature, provided he grows up with loving, self-respecting parents.

[1] New York: Macmillan, 1938, $1.75.

What I am saying in different ways is that you don't have to be grimly determined, in order to bring up a healthy, agreeable, successful child. It's the parents who have a natural self-confidence in themselves and a comfortable, affectionate attitude toward their children who get the best results—and with the least effort.

There is more about schedules in Section 20, toilet training in Section 185, sleep in Section 86.

15. He isn't frail. "I'm so afraid I'll hurt him if I don't handle him right," a mother often says about her first baby. You don't have to worry, you have a pretty tough baby. There are many ways to hold him. If his head drops backward by mistake it won't hurt him. The open spot in his skull (the fontanel) is covered by a tough membrane like canvas that isn't easily injured. The system to control his body temperature is working quite well by the time he weighs 7 pounds if he's covered halfway sensibly. He has a good resistance to most germs. During a family cold epidemic he's apt to have it the mildest of all. If he gets his head tangled in anything he has a strong instinct to struggle and yell. If he's not getting enough to eat, he will probably cry for more. If the light is too strong for his eyes, he'll blink and fuss. (You can take his picture with a flash bulb, even if it does make him jump.) He knows how much sleep he needs and takes it. He can care for himself pretty well for a person who can't say a word and knows nothing about the world.

16. Enjoy him as he is—that's how he'll grow up best. Every baby's face is different from every other's. In the same way every baby's pattern of development is different. One may be very advanced in his general bodily strength and co-ordination, an early sitter, stander, walker—a sort of infant athlete. And yet he may be slow in doing careful, skillful things with his fingers, in talking. Even a baby who is an athlete in rolling over, standing, and creeping may turn out to be slow to learn to walk. A baby who's advanced in his physical activities may be very slow in his teething and vice versa. A child who turns out later to be smart in his schoolwork may have been so slow in beginning to talk that his parents were afraid for a while that he was dull; and a child who has just an ordinary amount of brains is sometimes a very early talker.

I am purposely picking out examples of children with mixed rates of development to give you an idea of what a jumble of different qualities and patterns of growth each individual person is composed.

One baby is born to be big-boned and square and chunky, while another will always be small-boned and delicate. One individual really seems to be born to be fat. If he loses weight during an illness, he gains it back promptly afterwards. The troubles that he has in the world never take away his appetite. The opposite kind of individual stays on the thin side, even when he has the most nourishing food to eat, even though life is running smoothly for him.

Love and enjoy your child for what he is, for what he looks like, for what he does, and forget about the qualities that he doesn't have. I don't give you this advice just for sentimental reasons. There's a very important practical point here. The child who is appreciated for what he is, even if he is homely, or clumsy, or slow, will grow up with confidence in himself, happy. He will have a spirit that will make the best of all the capacities that he has, and of all the opportunities that come his way. He will make light of any handicaps. But the child who has never been quite accepted by his parents, who has always felt that he was not quite right, grows up lacking confidence. He'll never be able to make full use of what brains, what skills, what physical attractiveness he has. If he starts life with a handicap, physical or mental, it will be multiplied tenfold by the time he is grown up.

Now, of course, once in a great while a baby seems to be *generally* slow in his development, doesn't hold his head up, or respond to people, or show an interest in his surroundings, at an age when other babies are doing these things. Should a parent be philosophical about this and try to forget it? That would be carrying it too far. One of these babies is just born to be that way and there's no magic way to change him; but another may have a deficiency disease which can and should be treated early. That's a reason for having a doctor check a baby regularly. There is more about development beginning in Section 134.

WHAT FEEDING MEANS TO THE BABY

17. He knows a lot about diet. You might get the idea from the formula slip which the hospital gives you when you take the baby home that feeding a baby is something like chemistry. You take so many ounces of milk and water, mix them this way, cook them that way, put exactly 3½ ounces into each of 6 bottles and feed at 6 A.M., 10 A.M., 2 P.M., 6 P.M., 10 P.M., 2 A.M. The formula slip is concerned with the details; it forgets to tell you that the food is for a human being who has strong feelings about how much he wants, and when he's hungry again. It's true that you have the responsibility of making the formula carefully. The amounts have been calculated by the doctor on the basis of the baby's weight and what he seemed to want in the hospital. You have done your part. But the baby is the one who knows how many calories his body needs and what his digestion can handle. If he's regularly not getting enough, he'll probably cry for more. Take his word for it and get in touch with the doctor. If there's more in any bottle than he feels like, let him stop when he wants to.

Think of the baby's first year this way. He wakes up because he's hungry, cries because he wants to be fed. He is so eager when the nipple goes into his mouth that he almost shudders. When he nurses, you can see that it is an intense experience. Perhaps he breaks into a perspiration. If you stop him in the middle of a nursing, he may cry furiously. When he has had as much as he wants, he is groggy with satisfaction and falls asleep. Even when he is asleep it sometimes looks as if he were dreaming of nursing. His mouth makes sucking motions and his whole expression looks blissful. This all adds up to the fact that feeding is his great joy. He gets his early ideas about life from the way feeding goes. He gets his first ideas about the world of people from the person who feeds him.

When a mother constantly urges her baby to take more than he wants, he is apt to become steadily less interested. He may try to escape from it by going to sleep earlier and earlier before the feeding is over, or he may rebel and become more balky. He's apt to lose some of his active, positive feeling about life. It's as though he got the idea, "Life is a struggle. Those people are always after you. You have to fight to protect yourself."

So don't urge a baby to take more than he is eager for. Let him go on enjoying his meals, feeling that you are his friend. This is one of the principal ways in which his self-confidence, his joy in life, and his love of people will be firmly established during the first year. Read *Feeding Our Old Fashioned Children* by C. Anderson Aldrich and Mary M. Aldrich.[2]

18. **The important sucking instinct.** A baby nurses eagerly for two separate reasons. First, because he's hungry. Second because he *loves* to suck. If you feed him plenty, but don't give him enough chance to suck, he'll feel unsatisfied in his sucking craving and try to suck something else—his fist, or his thumb, or the clothes. It's important to give him a long enough nursing period at each feeding and to have a sufficient number of feedings each day. All this is taken up in detail in Sections 125 to 132 on thumb-sucking. The thing to watch for in the beginning is not whether the baby is actually sucking his thumb, but whether he looks as if he were trying to.

19. **Babies normally lose weight in the beginning.** A good-sized baby who gets formula from the start usually begins to gain it back in 2 or 3 days, because he can drink and digest well. The small or premature baby loses weight longer and regains it more slowly, because he can only take small feedings at first. It may take him several weeks just to get back to birth weight. This delay doesn't handicap him. Eventually he will gain rapidly to make up for it. The breast-fed baby is naturally going to be slower than the bottle-fed baby in regaining his birth weight, because his mother won't be able to supply him with much milk until he's 4 or 5 days old, and even then the milk is apt to come in slowly.

Some parents worry unnecessarily about the initial weight loss. They can't help feeling that it's unnatural and dangerous for the weight to be going down instead of up. They also may have heard that if a baby loses *excessive* amounts of weight, he may develop fever from becoming dehydrated (dried out). It's for this reason that many hospitals give water for the first few days to the babies who get no formula and whose mother's milk has not come in yet. But the chance of dehydration fever is small, and it can always be cured immediately by giving fluid.

[2] New York: Macmillan, 1941, $1.75.

Concern about the early weight loss may not only upset a mother needlessly, but it may also cause her to abandon breast feeding before it has been given a fair chance. Some hospitals don't tell the mother the daily weight of the baby, to keep her from worrying, but this method doesn't always work. The mother who is anxious imagines the worst. It's better for mothers to realize how natural the weight loss is and resolve to leave the whole matter in the doctor's hands.

SCHEDULES

Your doctor will prescribe the baby's schedule on the basis of his needs, and you should consult him about any changes. The following sections are mainly a general discussion of what schedules are all about. The specific suggestions are only for those parents who are unable to consult a doctor regularly.

20. What a feeding schedule is for. You may be so used to the idea that babies are fed on schedule that you are surprised to hear that it was ever different. Up to sixty years ago, before there was much knowledge of infant feeding, babies were fed when they seemed to be hungry, even in the most careful homes. And even today most of the mothers all over the world have never heard of a schedule. They would probably think it was pretty funny.

Why were regular schedules invented? When medical scientists began to study the feeding of babies at the end of the last century, they had to make some order out of chaos. They discovered how much milk babies of different weights and ages needed on the average. They found that the average baby in the early months, if he had his fill of milk, would be satisfied for about 4 hours. They realized that some babies cried from painful indigestion, but that their mothers usually thought it was hunger, and tried to give them more to eat. This didn't help the indigestion.

It was natural that these scientists would set up some kind of system for infant feeding and teach it to other doctors and mothers. We still must have a rough idea of what average babies of various sizes will probably need in the way of formula, and how often. However, what we have been realizing more and more in recent years is this: It is wrong to take the figures

for an average baby too seriously when you are dealing with any one particular baby, or to try to fit every baby into the same mold.

Mothers have sometimes been so scared of the schedule that they did not dare feed a hungry baby one minute early. They have even accepted the idea that a baby would be spoiled if he were fed when he was hungry. What an idea! As if puppies are spoiled by being able to nurse when they are hungry. Why does a baby cry near mealtime? Not to get the better of his mother. He wants some milk. Why does he sleep the next 4 hours? Not because he has learned that his mother is stern. It's because the meal satisfies his system for that long.

It will help you to realize how natural a flexible schedule is if you will stop and think of a mother, far away in an "uncivilized" land, who has never heard of a schedule, or a pediatrician, or a cow. Her baby starts to cry with hunger. This attracts her attention and makes her feel like putting him to breast. He nurses until he is satisfied, then falls asleep. Seeing him peacefully asleep satisfies the mother, too. She puts him down and goes about her work. He sleeps for several hours until his hunger pains wake him up. As soon as he starts crying again his mother nurses him. The rhythm of the baby's digestive system is what sets the schedule. He never stays unhappy for long. The mother follows her instinct without any hesitation. She doesn't have to bite her nails, waiting for the clock to say it's feeding time. You can see, then, that it doesn't defy the laws of nature to adjust the schedule to the baby.

This is not an argument against reasonable regularity. I do not think it is harmful for a baby or a mother to work toward a schedule. We all come around to regular meals sooner or later. The mother has to run the rest of her household by the clock, and when the baby is ready to fit in, it will help everybody. It's all a question of what he's ready for. One baby is all set for a 4-hour schedule when he is born. Another one will be hungry at irregular intervals—sometimes 4 hours, sometimes 3—until he is a couple of months old. Still another, born at exactly the same weight as the first, will always be ready to eat after 3 hours in the early weeks.

If a baby is born in a hospital, the nurses and doctors decide, on the basis of his weight and how he behaves, whether he should be on a 3- or a 4-hour schedule. But he may be feeling differently about it by the time you get him home. Some babies become definitely more wakeful and hungry at about the age of 2 weeks. Even though they adjusted well enough to a 4-hour schedule in the hospital, they may need a 3-hour schedule for a while afterwards. The baby's doctor is the one to make the decision and prescribe the formula.

21. **The 2 A.M. feeding doesn't start a habit.** Many people have the idea that if a baby is on a certain schedule for a number of days, it will become a habit which he will be unwilling to change afterwards. This is not true. Every baby, as he grows older, wants to wait longer between meals.

The same thing applies to a 2 A.M. feeding. If your baby wakes at 2 A.M., don't fret about getting him over this "habit." He will give up this feeding as soon as he can afford to, as soon as he's old enough and getting sufficient milk at his other feedings to last him through the night. One baby is ready at birth, another at 2 weeks, another at a month. It's generally the small babies that need it longer.

A mother may say, "I want to break him of the 2 A.M. feeding right away, so that we can all get our sleep." But what happens? The baby wakes promptly at two and starts crying. Soon everyone in the household is awake. The mother gets up and warms a bottle of water, with the idea that it will pacify him, but show him that he can't have milk. The baby is pacified for 10 or 15 minutes, and everybody is getting ready to go to sleep again. But then the baby's stomach begins its hunger contractions again, and he begins to cry. He isn't crying because he wants to keep a "habit." Letting him cry doesn't stop the hunger pains, at least not until he gets very tired. It seems better for the mother to nurse him with the breast or bottle in the first place. Then everyone can go to sleep, happy.

22. **Working toward a regular schedule** (if you cannot consult the doctor regularly). Let's say you want to get your baby on a regular schedule as soon as it's reasonable. On the other hand, you don't want to take the schedule so seriously that you make yourself and your baby miserable. If he is asleep when

feeding time comes around, you can wake him up. You won't have to urge him to eat. A baby who is waked up 4 hours after his last feeding will be starving hungry in a few seconds. But suppose he wakes half an hour early for his next feeding. You don't have to feed him the first minute he whimpers. He's not sure himself he's hungry. But if in 10 or 15 minutes he's crying hard with hunger, I wouldn't wait any longer. What happens to the schedule? He may make up the difference and sleep long enough before the next feeding to get back on schedule. If he doesn't make up the time during the day, he'll probably make it up at night. If he's always waking early, maybe he isn't getting enough to last him 4 hours. Then, if he is being breast fed, you let him nurse more often, expecting that the more frequent emptying of the breast will stimulate it to supply more milk in the next few days. When he gets a larger amount, he will be able to last longer. If he is on the bottle, draining every one, and regularly waking early, consult the doctor about increasing the formula. On the other hand, if he is leaving some in his bottles and still regularly waking early, then he may be a baby whose digestive system can't yet hold enough to last him 4 hours. He probably needs to be on a 3-hour schedule, for the time being. Consult the doctor.

It's mostly babies weighing under 7 pounds who need to be on a 3-hour schedule. But this is not an absolute rule. Some 6-pounders are willing and able to go 4 hours. And occasionally an 8-pounder can't hold enough to last more than 3 hours.

Most of the babies who need a 3-hour schedule during the daytime are able to go 4 hours at night, if they weigh as much as 5 pounds. The feedings usually work out as follows: 6 A.M., 9 A.M., 12 noon, 3 P.M., 6 P.M., 10 P.M., 2 A.M.

The easiest rule for the 2 A.M. feeding is not to wake the baby but to let him wake you if he wants to. A baby who still needs that feeding usually wakes surprisingly close to the hour of two. Then some night, probably when he's between 2 and 6 weeks old, he will sleep through until 3 or 3:30 A.M. You feed him then, and count it as a 2 A.M. feeding. He'll probably be awake and hungry again between 6 and 7 A.M. The next night he may sleep till 4:30 or 5 A.M. You feed him then, but this time you count it as a six o'clock feeding and hope that he'll be happy

until somewhere near 10 A.M. When a baby gets ready to give up the 2 A.M. feeding, he usually does it in a hurry, within two or three nights. Then you divide his total formula into five bottles instead of six.

The 10 P.M. feeding is the one that you can be the least regular about. Most babies, by the time they are a few weeks old, are perfectly willing to wait until eleven or even midnight for it. If you want to get to bed early, wake him at ten or even a little before. If it is more convenient to feed him late, suit yourself, as long as he is willing to sleep. Giving the 10 P.M. feeding late usually hasn't much effect in making the baby give up the 2 A.M. feeding.

Can you use other hours for a 4-hour schedule, aside from the usual 6 A.M., 10 A.M., 2 P.M., 6 P.M., 10 P.M., 2 A.M.? You certainly can, if the baby is willing. The commonest substitute is 7 A.M., 11 A.M., 3 P.M., 7 P.M., 11 P.M. (with or without 3 A.M.). The only hitch is, some babies always want to start the day between 5 and 6 A.M., no matter when they were last fed during the night. Once in a while, a lucky mother gets a baby who is on the usual ten, two, six, ten schedule, but is willing to wait until 7 A.M. for his first feeding, even when he is quite young. This is all right, too.

I have been saying that if the baby wakes half an hour early and seems really hungry, it is usually all right to feed him then. The same thing applies if he occasionally wakes an hour or even an hour and a half early. But suppose he wakes 2 or 3 hours early. If he had a good meal at his last feeding, the chances are against his being hungry again so soon. It is more likely that he has been waked by indigestion or colic. In this case, I would not be in a rush to feed him again. It won't help the indigestion. You can't be sure it's hunger just because a baby tries to eat his hand or starts to take the bottle eagerly. Many babies who are having colic will do both these things. It seems as if the baby himself couldn't distinguish between colic pains and hunger pains. This is discussed in Section 99.

In other words, you don't *always* feed a baby whenever he cries. If he is crying at the wrong times, you have to study the situation and discuss it with your doctor.

Changes in schedule, such as omitting the 10 P.M. feeding, are discussed in Sections 171 and 174.

23. The "demand" schedule. Some doctors and parents have been trying the experiment lately of going back to nature—never waking the baby, but feeding him whenever he seems hungry. With an average baby, this is apt to work out as follows: For the first 3 or 4 days of life he wakes infrequently. But, just about the time the mother's milk begins to come in, he gets hungrier, wakes and cries often, maybe 6 to 10 times in the 24 hours. This frequent nursing stimulates the mother's breasts and helps to increase the milk. If the baby becomes satisfied, he sleeps for longer and longer periods. By 2 weeks, he may be down to 6 or 7 feedings, and a little later still to 5 or 6. Now he's *averaging* 4 hours between feedings, but sometimes it's 3 and sometimes it's 5. He's apt to sleep all evening till midnight, and from that feeding until about 6 A.M.

If more and more babies come to be fed this way, and if it works out well, it may possibly become, in the future, one of the "regular" ways to feed babies. Time will tell. If you are particularly interested, you can discuss with your doctor whether he thinks it is practical or advisable for your baby. The method works particularly well in the early weeks of breast feeding, because, if the baby is getting only a small amount at each nursing, he naturally wakes and nurses often, and this is the best way to increase the quantity of milk.

However, it can be used with bottle-fed babies, too. The mother prepares the maximum number of bottles that the baby is apt to want on his hungry days. If he takes fewer feedings on other days, it merely means throwing away the unused formula.

One trouble with the "demand" schedule, in these days when the regular schedule has been so much the custom, is that it may leave an inexperienced mother feeling uncertain. She wonders how she will know when her baby is hungry. Now, if he has no indigestion, he will probably be able to teach her in a few days' time. But if he is a restless baby, or has frequent spells of colic, it will require more study, and keeping in close touch with the doctor. The demand schedule may be more difficult also for the mother who herself has to keep to a strict schedule because

of a job, or meals for her husband and older children, or because she wants to nurse the baby at times when a jealous older child is most apt to be busy outside the house.

I don't think myself it's very important whether a baby is fed purely according to his own demand or whether the mother is working toward a regular schedule—if she is willing to be flexible and adjust to the baby's needs and happiness.

Breast Feeding

THE VALUE OF BREAST FEEDING

24. Are there disadvantages to breast feeding? Fewer babies have been breast fed in recent years, especially in cities. The chief reason is that bottle feeding has gotten to be safe and easy. Another reason is custom. If most of the women in a community use bottle feeding, it seems like the most natural thing to the new mother.

Is bottle feeding easier? It is in two ways. The mother isn't held down. And she doesn't have to worry whether the baby is getting enough, because she can put as much formula in the bottle as he wants.

Some mothers shy away from breast feeding for fear that it will ruin their figures. You certainly don't have to eat excessively or get fat in order to make milk. A nursing mother needs enough extra to keep her own body from being depleted by the milk. She does not need to gain an ounce above her regular weight. As for the effect of nursing on the shape of the breasts, I am sure that, in many cases, it causes no permanent change. On the other hand, there are mothers whose breasts have become somewhat flattened after nursing several babies. Two things probably make a big difference in the result. If the mother will wear a good brassière, not just during the nursing

period, but also during her pregnancy when the breasts are already enlarged, this will prevent the stretching of the skin and of the supporting tissues in the breast. The other important thing is for her to keep from getting generally fat, during both her pregnancy and the nursing period. After all, the breasts will sag from becoming too fat even without pregnancy or nursing.

There are some women who just don't feel like nursing their babies—the idea goes against the grain. Should they try anyway? I think not. The revulsion against nursing comes from deep inside. It may disturb the mother's relationship to her child, and do more harm than good.

What about the woman who hesitates to nurse because she has to go back to work? The answer depends on her working hours, and how soon she must get back to the job. If she only has to be out of the home 8 hours a day, she can still nurse her baby with the exception of one feeding. Even if she can't nurse after she resumes work, it would still be worth while to breast-feed the baby temporarily if she has a month or two.

You hear it said that breast feeding "takes a lot out of a mother" in the sense of tiring and weakening her. In most cases this is nonsense. Of course a mother has to eat more when she is giving milk to a baby, just as she has to eat more when she goes swimming twice a day. But if a woman is healthy and happy, her appetite just naturally increases when her need for food increases. There is no more reason for a healthy mother to feel exhausted after a month of nursing than after a month of vigorous exercise, as long as her weight is staying steady. But breast feeding is exhausting and should be stopped if the mother is losing weight that she can't afford to lose, or showing other definite signs of poor health. This may be due to nervousness, which is keeping her from eating enough, or to a physical disease. The mother's doctor is the one to decide.

25. **Advantages of breast feeding.** Breast feeding is natural. On general principle, it's safer to do things the natural way unless you are absolutely sure you have a better way. Breast feeding has definite advantages that we know of, and it may have others that we aren't smart enough to see. It helps the mother physically. When the baby nurses, the muscle wall of the uterus contracts vigorously. This hastens its return to nor-

mal size and position. From the psychological point of view, it makes the mother feel close to her baby; she knows that she's giving him something real, something that no one else can give him. This feeling is good for her and for her relationship to the baby. Breast feeding probably gives the baby a feeling of closeness and security, too.

You may have heard that the baby gets some protection against disease from the colostrum (the fluid which comes in before the real milk), but this has never been proved. Breast-fed babies have somewhat fewer bowel upsets than bottle-fed babies. A big advantage of breast feeding is that the milk is always pure. A baby can't catch an intestinal infection from it. From a purely practical point of view, it saves hours of time every week, because there are no bottles to sterilize, no formula to mix and cook, no refrigeration to worry about, no bottles to warm. You appreciate this, particularly if you ever have to travel. Of course breast feeding saves money, too. There is another advantage that isn't often mentioned. It's more adapted to satisfying the baby's sucking instinct. At the breast he can suck as long as he feels the need. I think that there is less thumb-sucking among breast-fed babies, for that reason.

Suppose you want to breast-feed your baby, but don't succeed. Will the baby suffer, physically or emotionally? No, you can't put it that strongly. If you make the formula carefully, and if you keep closely in touch with the doctor when the formula doesn't agree, the chances are great that the baby will prosper from a bodily point of view. And if, when you give him his bottle, you cuddle him in your arms, he will be nourished spiritually, much as if he were at the breast. Mothers who have read what psychologists and psychiatrists say about the importance of breast feeding sometimes get the idea that it has been shown that bottle-fed babies turn out to be less happy than breast-fed babies. Nobody has proved that.

26. The mother can lead a normal life. Some mothers hesitate to nurse their babies because they have heard that they will have to give up too much themselves. Generally speaking, this is not so. There is no evidence that it will harm the baby if the mother smokes, uses alcoholic beverages in moderation, or goes in for athletics. The nursing mother can usually continue to eat

all the foods she is accustomed to. There is no reason to believe, for instance, that if she eats prunes, it will make the baby's bowels loose; or that if she eats fried food, it will give the baby indigestion. Once in a while, it is true, a baby seems to get upset every time his mother eats a certain food. Naturally, if this happens several times in succession she can give up that particular food. Some drugs get into the milk, but usually not in large enough quantities to affect the baby. A mother can take milk of magnesia, mineral oil, aspirin without its affecting the baby.

When a nursing mother becomes nervously upset, it sometimes cuts down, for the time being, the amount of milk she can produce. Occasionally it seems to make the baby feel out of sorts, too. Some women never menstruate as long as they continue to nurse. Others menstruate regularly or irregularly. Once in a while a nursing baby will be upset during his mother's menstruation. I know one baby that refused the breast altogether each time the mother had a period. She had to pump her breasts two or three times a day, for comfort and to keep the milk supply going. Meanwhile, the baby lived on a formula for those 3 or 4 days.

There is no reason why a nursing mother shouldn't let the baby have a bottle once in a while, or even once a day, in case she wants to be away from home for longer than 4 hours.

A mother does need to be sure, during the nursing period, that her diet contains plenty of the elements which the baby is withdrawing in the milk. A large amount of calcium (lime) is excreted in the milk, to enable the baby's bones to grow rapidly. If the mother takes too little, the breasts will withdraw it from her own bones. It used to be thought that she would lose calcium from her teeth, too, but this is probably not so. She should take as much milk as the baby is getting from her, and a little in addition for her own needs, in any beverage that she likes, or cooked into cereals, soups, puddings, or in the form of cheese (see Section 232). To avoid gaining weight, she can use skimmed milk, which contains just as much calcium. Her *daily* diet should include: vegetable, salad, and fruit for various salts and vitamins; meat, poultry, or fish, and preferably also an egg, for protein needs; whole grain in cereal or bread for the B-complex vitamins. In addition she will be eating a certain

amount of other starches (potatoes, rice, macaroni) to supply her energy needs. The amount of starches should depend on what her weight is doing. If her weight is ideal and staying stationary, she is already eating the right amount. If she is thin, or if she is losing weight, she should try to eat more starches, sugars, and fats. If she is too heavy, or is gaining weight that is unwelcome, the foods to cut down on are the starches and sugar. She should take vitamin D in some preparation to make sure she is utilizing the calcium in her diet.

GETTING STARTED AT BREAST FEEDING

27. Putting the baby to breast. Most babies take to the breast very well. It's easier in the early weeks to nurse the baby lying down. Lay him beside you on the bed. You lie on your side facing him. Move closer until the nipple touches his lips. You may need to prop yourself up on your elbow to bring the nipple to the right position. When he feels the nipple near his mouth he will "root around" trying to get hold of it. At times you may need to put a finger on the breast to give him breathing space for his nose. After a couple of weeks you can let him nurse as long as he wants to. During the first week it may be better to stop him after 15 minutes if the nipples feel at all sore. See Section 70 on bubbling.

You'll probably notice that the state of your feelings has a lot to do with how easily the milk comes. Hearing your baby cry may be enough to start your milk flowing. Worries and tenseness can hold the milk back. So try to get troubles off your mind before beginning. If possible lie down for 15 minutes before each feeding and do what is most relaxing, whether it's shutting your eyes, or reading, or listening to the radio.

After a mother has become accustomed to nursing and is relaxed at that time, she may fall asleep if she nurses lying down, especially at 2 A.M. or 6 A.M. when she is sleepy. Then there is a slight risk of obstructing the baby's breathing with her breast or arm. For this reason it's safer for her to nurse sitting up in bed or in a chair in the early morning hours or at any other time when she feels sleepy, unless a nurse or other helper is in the room.

28. Balky babies and retracted nipples. Occasionally a newborn baby is crotchety about starting breast feeding, especially when the nipples do not protrude well. If he searches around and can't find the nipple, he may cry angrily and pull his head backwards. There are several tactful things you can try. Put him to breast when he first wakes up before he gets too cross. If he starts crying on the first attempt, stop right away and comfort him before trying again. Take your time. It sometimes makes a nipple stand out better to massage it lightly (with fingers freshly washed in soap and water) or to let the baby nurse for a minute through a nipple shield (Section 40).

Even if the nipple will not come out, you may be able to get the baby started by flattening the front part of the breast between thumb and fingers so that the entire dark-colored portion can fit in his mouth. If he will suck a few times this way, he may be able to draw the nipple out. If you can learn the knack of expressing a little milk at the same time, it will lure him on.

There are two things that often make a balky baby angrier. The first is to hold his head, in trying to direct it toward the breast. Babies hate to have their heads held; they fight to get free. The other is to squeeze the baby across the cheeks to get his mouth open. A baby has an instinct to turn toward anything that touches his cheek. This is to help him find the nipple. When you squeeze him on both cheeks at the same time, you baffle and annoy him.

When a baby is refusing to take the breast, and carrying on, a mother can't help feeling spurned and foolish. She shouldn't let him hurt her feelings; he's the foolish one. If she'll keep trying for a few more nursings, there's a good chance that he'll find out what it's all about.

29. The early schedule. A baby is usually put to breast 12 hours or so after birth. He isn't left there very long the first few times (perhaps 5 to 10 minutes), because there's only a little fluid called colostrum, and it's better to go easy on the mother's nipples until they get used to the sucking. Usually he's put to breast every 4 hours, and the 2 A.M. feeding is often omitted for the first few days.

Somewhere around the 3rd or 4th or 5th day, the mother's milk begins to come in. If the nipples are comfortable, the nurs-

ing time is gradually increased, up to about 20 minutes. Now the baby will probably be nursed at 2 A.M. also. If he is small, or gets too little milk to last him for 4 hours, he may be changed to a 3-hour schedule during the day. If all goes well, the supply of milk increases steadily until the baby's demands are satisfied.

30. **One or both breasts?** (if you cannot consult a doctor). Usually the baby is put to only one breast each feeding, if he is getting enough milk to satisfy him that way. This method is more likely to satisfy his sucking instinct, too. Let him nurse as long as he wishes after the first 2 weeks. It will probably average around 20 minutes, but may be more.

If one breast does not supply enough, it will increase the amount somewhat to use both at every feeding. Let him nurse 10 to 15 minutes at the first, and as long as he wants on the second. At each feeding, alternate the breast that is used first.

31. **Care of the nipples.** To avoid infection, it's important to wash the hands with soap before touching the nipples. The nipples are usually wiped with boiled water on a piece of sterile cotton before and after nursing.

Unfortunately, the nipples sometimes become sore and cracked in the first two weeks of nursing, especially in women with light skin. This raises several points about prevention and treatment. Doctors sometimes recommend massaging the nipples during the last month of pregnancy, to toughen them. This should be done with very clean hands.

If your baby doesn't let go when nursing is over, don't try to pull him off; this hurts the nipples. Make an air passage into his mouth by pressing the breast away from the corner of his lips with one finger. This releases the suction.

Some babies have spells of chewing on the nipple, especially in the early weeks. It's better to prevent this, especially if there is any tendency to sore nipples. If he's had about enough time already, end the feeding. If not, take him off the breast for a minute and then try again.

When the nipples begin to be even slightly sore, it is wise to notify the doctor and to limit the nursing time for a few days—to a total, say, of 16 minutes per feeding (8 minutes each if both breasts are used). The doctor may recommend some medication to apply after nursing.

If the soreness becomes worse or a crack develops, you should certainly consult the doctor. If this is impossible, you can try the following suggestions. A baby who nurses vigorously may be able to get enough breast milk through a nipple shield for a few days (Section 40). If this doesn't work, you can use manual expression of the breast milk, or a breast pump (Section 40). If the nipples are merely sore, not cracked, and none of these methods secures a fair amount of milk, and if the breasts are drying up before the nipples heal, try letting the baby nurse very briefly at the breast—a total of 8 minutes each feeding. In any case, the breast-milk supply will decrease somewhat, but it will probably revive again when he gets back to normal nursing. In the meantime, you may have to give him supplementary formula feedings.

If a sore spot develops inside the breast itself, this may be an infection, or breast abscess. The skin may become red over it. You should take your temperature and get in touch with your doctor. However, with modern methods of treating infections, it may not be necessary to keep the baby from nursing at that breast, even temporarily.

A caked breast is one which becomes overfull of milk and very hard. It may retract the nipple so that the baby has trouble getting hold of it. If the baby can't nurse, use a breast pump. It is no reason to stop nursing; it will soften by itself soon. But keep in touch with the doctor.

32. **How to try extra hard** (if you cannot consult the doctor). You hear of women who wanted to nurse their babies but didn't succeed. People talk about how complicated our civilization is and how it makes mothers too tense to nurse. There's no doubt that nervousness works against breast feeding, but it is not the only important factor. Breast feeding often fails because it isn't given a good trial.

There are three factors that make a big difference: (1) keeping away from formula, if that is possible, (2) not getting discouraged too early, (3) sufficient stimulation of the breasts after the milk has begun to come in.

If a baby is given a formula for the first 3 or 4 days of life, the chance of successful breast feeding is diminished. The baby who is satisfied by plenty of formula doesn't try so hard at

breast. (Water given at this period, to make sure he doesn't become too dried out, is not likely to interfere with his hunger at breast.) After the mother's milk has begun to come in, it's wise to avoid formula, too, if the baby can be kept fairly well satisfied and is not continuing to lose weight.

Sometimes a mother becomes discouraged just at the moment when her milk is coming in, or a day or two later because she isn't producing very much. This is no time for her to quit. She hasn't given herself half a chance. It is certainly worth continuing if she is producing as much as one ounce at any feeding on about the 5th day. If a mother has a practical or trained nurse at this stage, it's a great help to have one who is encouraging and co-operative.

The night nursings which will probably come at about 10 P.M. and 2 A.M. are as important as the daytime nursings in giving the breasts regular stimulation at first. If the breasts are supplying an insufficient amount of milk to keep the baby satisfied for 3 or 4 hours, it helps to let him empty them more frequently (including both breasts each feeding), provided the nipples aren't sore. This is the way the baby and the breasts would adjust to each other in a faraway spot where there was no cow's milk. The frequent emptying of the breasts stimulates them to produce more milk if they are capable of it. Then the baby is able to go for longer periods again.

These general suggestions are for a mother who has to rely on her own judgment between doctor's visits, but none of them should be followed to extremes. There will, of course, be cases where the doctor at the time of delivery advises formula in view of the baby's size or condition, or the mother's inability to produce enough milk for previous babies. A baby cannot be kept off formula indefinitely if he becomes miserably hungry, or continues to lose weight, or develops fever from insufficient fluid. Frequent nursing shouldn't be carried to the point where the nipples become cracked or the mother is exhausted from having no time to rest.

If a mother is in a hospital or able to keep in frequent touch with the doctor, it is he who will decide at each step such questions as: how many days the baby can go on an insufficient amount of breast milk without resorting to formula, how much

nursing the mother's nipples can stand, how frequently the mother should be waked at night, how to adjust the hospital's schedules to the baby's needs. The point is, though, that the doctor is influenced in many of these decisions by the mother's attitude toward nursing. If she makes it clear that she is eager to succeed, it helps him in giving the directions that will make it possible.

WHEN THE BREAST MILK IS INSUFFICIENT

33. **Trying to increase it after getting home** (if you cannot consult the doctor regularly). Suppose that in the hospital your baby was nursed as frequently as possible, and received both breasts at each feeding, but still did not get enough. The doctor decided that he had to have some formula, too. Let's say that the baby was averaging 2 ounces from both breasts and required a 2-ounce bottle in addition at each nursing. You decided after talking it over with the doctor that you wanted to continue the breast feeding after going home with the hope of eventually getting the baby entirely breast fed.

Sometimes the mother feels so much more relaxed and natural at home that the breast-milk supply increases without any other encouragement, and the baby is so satisfied that he isn't interested in the bottle any more. Often, however, the doctor finds it necessary to cut down gradually on the amount of formula and count on the baby's increasing hunger to help do the job. Here is one method: As soon as you get home, reduce the amount in each bottle by ¼ ounce each day until you are down to no bottle at all. What will happen? As you cut down the formula, the baby will probably be hungry earlier. You nurse him when he becomes hungry, whether it's 4, or 3, or even 2½ hours at times. This sounds like an awful lot of work, but it won't be forever. You are hoping that the frequent emptying of the breasts will stimulate them to produce more and more milk. If this happens, the baby will begin to sleep for longer and longer periods again. In a week or two he may work himself back onto a 4-hour schedule. (I remember one baby who never got more than an ounce at a time from the breast in the hospital, who worked up to 5 ounces in 2 weeks at home. Of course, this won't happen in every case.) If you try it for 5 or 6 days and the baby

remains hungry all the time and fails to gain weight, then you have to go back to the formula.

It's most important during this trial period that the mother take wonderful care of herself, avoid getting tired at all costs, let the housework go to the dogs if necessary, forget about outside worries and obligations, keep visitors down to a few comfortable friends, eat and drink well.

There are two sides to the matter of fluids. There's no good to be gained from drinking more fluid than feels comfortable, because the body promptly gets rid of excess water through the urine. On the other hand, a new, excited, busy mother may forget to drink as much as she needs, and go thirsty through absent-mindedness. This will cut down on the milk supply.

Some doctors recommend the manual expression of any milk that remains in the breast after the baby has finished nursing, as an excellent method of increasing the supply (Section 40).

34. **Breast and bottle both.** If a mother who can't produce enough milk to completely satisfy the baby, wants to go on with a combination of breast and bottle, there is no reason why she shouldn't. However, in many cases of mixed feedings, the breast-milk supply gradually decreases. Also, the baby may come to prefer the bottle and reject the breast altogether.

Most women don't want to go on with both, because it means all the trouble of formula making *and* being tied down by the nursing schedule. The most sensible thing to do when the mother is producing a reasonable amount of milk (say half or more of what the baby needs), is to first make a real effort to dispense with the formula altogether. If this does not increase the breast supply sufficiently, then she can wean the baby completely to the bottle, knowing that she has tried as hard as she could.

35. **How to supplement the breast with the bottle** (if you cannot consult a doctor). Let's say that you have tried to get along on breast feeding alone, but that it is not providing sufficient milk. You have to give some formula to satisfy the baby, but you want to do it in the way that is least likely to decrease the breast-milk supply. I will discuss the subject in different paragraphs, depending on how much extra the baby needs, and use the word "complemental" to mean a bottle that is given

right after (in addition to) a breast feeding, and "supplemental" to mean a bottle that is given *instead* of a breast feeding. In a general way, it's more convenient to omit certain breast feedings altogether and give supplemental bottles instead. On the other hand, there's slightly more chance of keeping up the breast-milk supply if you continue to give the breast at every feeding, and then give a complemental bottle in addition, at certain feedings when the baby doesn't get enough at breast.

Suppose the breasts are supplying enough at all but one feeding. 6 P.M. is apt to be the scantiest, 2 P.M. the next. You could try giving a complemental bottle in addition to the 6 P.M. nursing. Or you could give a supplemental bottle instead of the 2 P.M. nursing; then there might be enough breast milk stored up at 6 P.M.

Suppose the breasts are supplying less than enough at two or more feedings. You could give complemental bottles after the breast feedings at 10 A.M., 2 P.M., and 6 P.M. The 6 A.M. breast feeding is apt to be the largest of the day, and may supply all that the baby needs at that time. The 10 P.M. breast feeding is also apt to be fairly large. Another method, if the breasts are supplying less than enough at several feedings, would be to breast-feed alone at 6 A.M., 2 P.M., 10 P.M., and give supplemental bottles alone at 10 A.M. and 6 P.M. (also at 2 A.M. if the baby still needs to be fed then).

If the breast-milk supply is insufficient at all feedings, you will need a bottle at all feedings, whether you give the breast first or not.

How much formula do you put in each bottle, whether it is a complemental or a supplemental bottle? The answer is: as much as the baby seems to need. If you have a baby weighing 9 pounds or more he may want 6 ounces in his supplemental bottles, less if he is smaller. If it's a complemental bottle after a breast feeding, he might want 2 to 3 ounces. If so, offer 3 ounces and let him take what he wants.

If your doctor has not given you a formula, and you cannot reach him, you can try the formulas in this book. In Section 37 there are directions for making a formula for a 6-ounce relief bottle. You could use this for making one 6-ounce supplemental bottle, or for two 3-ounce complemental ones. If you need 12

ounces altogether, for two 6-ounce bottles, or for three 4-ounce bottles, then double the quantities listed. If you need only 3 ounces altogether, use half the quantities listed. Don't worry too much about coming out even. If, for instance, you need one 4-ounce bottle a day, make a 6-ounce bottle and throw out what the baby doesn't want.

You can go on multiplying the 6-ounce relief-bottle formulas as you need more, or you can turn to Section 52 and pick the formula that comes the closest to the total amount you need. The first six formulas in Section 52 are all the same strength, and the same strength as the relief-bottle formula. The formulas numbered from #7 to #11 get progressively stronger.

36. **When the breast milk decreases temporarily** (if you cannot consult a doctor). The amount of breast milk may decrease temporarily if the mother gets tired or worried or ill. It often happens the first day or two after getting home from the hospital.

When a breast-fed baby shows that he's unsatisfied, by waking early, crying hungrily, searching around with his mouth for something to suck, the mother's first thought may be that he needs a formula. I think this is the wrong solution in most cases, if she is counting on continuing with the breast feeding. It is apt to satisfy the baby so well that he stops trying as hard at the breast. As a result the breast milk may not readily come back to what it was before.

It's better, in most cases, when the baby is temporarily unsatisfied, to nurse him more frequently, for the time being, and at both breasts each feeding. Usually in 2 or 3 days the breast supply will be completely revived and the baby will be able to get back on about a 4-hour schedule. This general suggestion should not be taken too literally, however. If a baby seems to get very little at one feeding of the day (say at 6 P.M.), and keeps crying miserably, it will not affect the breast-milk supply too much to give him an occasional bottle. What I have been advising against is regularly giving formula 2 or 3 times a day just because the baby is slightly dissatisfied, if you are trying to get him completely breast fed.

If after 4 or 5 days of more frequent nursing the baby is still too hungry and not gaining weight, a complementary formula

will probably have to be given regularly, or the baby weaned to the bottle completely.

WEANING FROM THE BREAST

37. A relief bottle (if you cannot consult a doctor). Use it regularly if you plan to wean from the breast between 2 and 8 months. Any mother who is breast-feeding her baby may wish occasionally to omit a nursing because she wants to be away from home for more than 4 hours. There is no harm in this, once the breast-milk supply has become well established. The relief bottle can be given every day if desired, at either the 10 A.M., 2 P.M., or 6 P.M. feedings. (When the baby is off the 2 A.M. feeding, the mother will usually be too uncomfortable to omit either the 10 P.M. or the 6 A.M. nursing, since this would leave the breasts full for 12 hours. Such a long interval might also discourage the breast-milk supply.)

If a mother plans to wean her baby from breast to bottle sometime between 2 and 8 months, it's a good idea to offer a relief bottle at least twice a week, even though she could nurse just as well. The reason is that some babies become so set in their ways during this age period that they will refuse to take a bottle of milk if they have not been used to it, and this may make quite a struggle. A baby rarely gets this opinionated before the age of 2 months. And after 8 months he will probably be weaned directly to the cup.

It is sometimes recommended that *all* breast-fed babies get a bottle at least twice a week, even though a mother is planning to nurse her infant until he is weaned to the cup. This is on the theory that the mother might have to stop nursing for some unexpected reason. You can decide for yourself, balancing the inconvenience of making the bottle against the risk of the baby putting up a struggle in case of sudden weaning.

Your doctor will give you a formula for a single bottle. If you cannot consult a doctor you can try the following: 4 ounces of pasteurized whole milk (shake the bottle), 2 ounces of water (as in all formula-making, you will have to add an extra ounce or two of water to the original mixture to allow for evaporation), 2 level teaspoonfuls of granulated sugar. Mix, bring to a

boil, simmer for 3 minutes, strain into a sterilized bottle. See Sections 57 to 62.

You should end up with 6 ounces of formula. Let the baby take as much of this as he wants. A small baby won't want it all. It will be about enough for the average 10-pounder. If it's insufficient for a big baby, strengthen it to 5 ounces of milk, one ounce of water, 2 level teaspoonfuls of sugar. If you need it stronger still, make it 6 ounces of milk, 2 teaspoonfuls of sugar, no water (except what you add to allow for evaporation).

For most families, it is more convenient to make a formula for a single bottle from pasteurized milk than from evaporated milk, because only a very small amount of the can of milk would be used. However, if you don't have pasteurized milk, or if you will be able to use up the rest of the evaporated milk for other purposes, you may prefer to use evaporated milk for the relief bottle. To make a 6-ounce formula, use 2 ounces of evaporated milk, 4 ounces of water, one or 2 more ounces of water for evaporation, 2 level teaspoonfuls of granulated sugar. Bring to a boil, simmer 3 minutes. The next stronger formula would be 2½ ounces of evaporated milk, 3½ ounces of water, 2 level teaspoonfuls of sugar. The strongest to use would be 3 ounces of evaporated milk, 3 ounces of water, 2 teaspoonfuls of sugar.

38. **Weaning when there is little breast milk** (if you cannot consult a doctor). Weaning from the breast is quite easy when the mother is producing only a small amount of milk. It's usually not necessary for her to bind her breasts or limit her own fluids. She can just stop putting the baby to breast and wait. If the breasts should get so full that they are uncomfortable, she can nurse him for 10 or 15 seconds. This will relieve the pressure, without really stimulating the breast. If the breasts should become uncomfortable again, she can repeat this. If she is producing a moderate amount of milk, she should plan to wean more gradually. It still isn't necessary to bind the breasts or to limit fluids. Try omitting every other breast feeding. If, in a day or two, the breasts have not become uncomfortably full, stop all regular nursing, but put the baby to breast for a short period if the breasts then become uncomfortable.

If you have no doctor to advise you, use the formula in Section 52 which is nearest to your baby's weight. Don't try to get

him to take more than he wants. If he needs more than the formula provides, change to the next larger one.

39. **Sudden weaning from the breast** (if you cannot consult a doctor). You may have to suddenly wean the baby from the breast if, for instance, you become seriously ill, or if you have to go out of town for an emergency. (It is not usually necessary to wean the baby because of mild or moderately severe illness in the mother. Your doctor is the one to decide this.) One method is to limit the fluids that the mother drinks and to apply a tight binder and ice bags to her breasts. This is a pretty uncomfortable business. A better way is to relieve the breasts whenever they become uncomfortably full, either with a breast pump, or by manual expression. If these methods aren't practical and you are near a doctor, he may recommend injections, for several days, of a special preparation that decreases milk production.

If you have no doctor to advise you, use the formula in Section 52 which is nearest to your baby's weight. If he isn't satisfied, increase to the next larger formula. If he weighs over 10 pounds start with formula #6. Then, if he isn't satisfied, change to #7 in a couple of days, then to #8, and so on, until he seems to be getting enough.

It's a little safer when suddenly weaning to a cow's-milk formula, to weaken it to three-quarter strength the first 2 or 3 days to help the baby's digestion to make the change, and to see how it works. There are directions for weakening in Section 51.

40. **Breast pumps, manual expression, nipple shields.** There are three kinds of breast pumps. The simplest, least expensive, and easiest to find is of glass with a rubber bulb to apply the suction. More efficient, but harder to find, is a water-type breast pump. One part of the pump attaches to an ordinary water faucet. When it is turned on, it creates suction at the breast. Then there are electric breast pumps, which can sometimes be rented from hospitals and surgical supply stores.

Manual expression or breast pumps are used to secure milk for the baby when he cannot or will not nurse at the breast, though the mother has plenty of milk. A small, premature baby may be too weak to nurse or to be taken out of the incubator. He can be fed breast milk from a bottle or medicine dropper. When an ill mother is away in a hospital, or when it is considered un-

wise, in the home, to expose the baby to her directly, her milk can be collected and given to the baby from a bottle (or discarded) until she can nurse him again.

When it is desired to secure plenty of milk or keep the breasts functioning, they are emptied at regular intervals. When the breasts are partially emptied to keep the mother from pain, during weaning, it is done only as often as necessary, and only long enough to relieve the pressure.

The best way to get milk from the breast artificially is by means of hand, or "manual," expression. The milk collects in sacs which lie deep under the dark area ("areola") which surrounds the nipple. In the method described here you will press these sacs between your thumb and the inside edge of a cup.



Wash your hands carefully with soap and water. Use a sterilized teacup with a rim which flares outward. Tuck the lower edge of the cup deep into the left breast at the lower edge of the areola (where the dark skin meets the normal-colored skin), and tip the cup up, part way, holding it with the left hand. Place the thumb of the right hand on the *upper* edge of the areola. Now the outer part of the areola is being pressed between the right thumb and the rim of the cup. Press the right thumb firmly inward (toward the rim) and then downward (toward the nipple). This squeezes the milk from the sacs into the tubes running through the nipple. When you press toward

the nipple, you do not slide your thumb across the dark skin, the skin moves with the thumb. It is not necessary to squeeze or even touch the nipple itself.

With a little practice, you will be able to press the milk out in a fine spray. The first few days your thumb may be tired and lame, but this won't last. If you are emptying a full breast, it may take 20 minutes, more if you are just learning. If you are attempting to empty the breasts completely after the baby has finished nursing, it will take only a few minutes. When the breast is full, the milk comes in a spray. When it is partly empty, it comes in drops. Stop when no more milk comes. Naturally, if you were to wait 10 minutes the breast would have made more milk, but you don't have to empty it again.

With either the breast pump or manual expression, the milk is collected in a sterilized cup or other container that has been boiled for 5 minutes. If it is to be used right away, it can be put directly into a sterilized nursing bottle, by means of a sterilized funnel. If it has to be kept for hours, it should be brought to a boil in a saucepan, then put into a sterilized bottle, and stored in the icebox.

A nipple shield consists of a rubber nipple attached to a glass cone which fits over the front of the breast. As the baby sucks on the rubber nipple, it makes a vacuum in the cone, which draws the mother's milk. It is used temporarily when the mother's nipples are sore. A baby has to be able to suck vigorously to get enough milk. (Old-fashioned lead nipple shields should not be used, because they may cause lead poisoning.)

41. **Gradual weaning from breast to cup in the last part of the first year** (if you cannot consult a doctor). Suppose a mother is producing plenty of milk, how long should she plan to nurse? Best of all would be to nurse until the baby is ready for weaning to the cup. As is pointed out in Section 177, one baby is ready for the cup earlier than another. Most breast-fed babies are ready somewhere between the ages of 8 and 12 months. (This is in contrast to bottle babies, many of whom are unwilling to give up the bottle until they are well over a year old.)

It's a good idea to begin offering a sip from the cup from the age of 5 months, so that the baby gets used to it before he is too opinionated. Then, sometime in the second half of the first year,

most commonly between 8 and 10 months, you notice he is beginning to be less eager for the breast. He nurses for shorter periods. If he is also drinking well from the cup, I would assume he was ready for gradual weaning. Now offer him the cup at all his meals and increase the amount as he shows his willingness to take more, still breast-feeding him at the end of the meal. Next, leave out one of his daily breast feedings, the one that he seems the least interested in, giving him only the cup. This is usually at breakfast or lunch. In a couple of weeks, omit another breast feeding if he seems willing, and in 2 more weeks, the last one. Don't rush him. His willingness to be weaned may not progress steadily. If he gets into a period when he is miserable from teething or illness, he may want to retreat a little. This is natural enough and there is no danger in accommodating him. When you stop to think for a minute what a tremendous joy nursing has been to him from the day he was born, you don't wonder that he wants to go back to more nursing when life looks dark. It's better to avoid making other important changes in a baby's life (for instance, moving to another house or starting toilet training) during the period when he is being weaned.

Sometimes a mother will be afraid to give up the nursing altogether, because the baby is not taking as much milk from the cup as he used to take from the breast. This may postpone the weaning indefinitely. I would stop the nursing if the baby were taking an average of 4 ounces from the cup at each meal, or a total of 12 to 16 ounces a day. After the nursing is stopped, he will probably increase the amount from the cup up to a total of 16 ounces or more. This is enough, with all the other things he is eating.

I think it is preferable to have a baby weaned from the breast by a year if he seems ready for it; if not, as early in the second year as he is ready. The child himself seldom demands the breast after 1¼ years, and it's apt to be continued just to get him to sleep or for some other reason. When breast feeding is continued beyond the age that the child really needs it, it is likely to become a habit that makes him unnaturally dependent on his mother.

Some other points about weaning are taken up in Sections 176 to 179.

42. Gradual weaning from breast to bottle in the first 6 months (if you cannot consult a doctor). There are lots of mothers who either aren't able or don't want to nurse a baby until he is ready to be weaned to the cup toward the end of his first year. In one case the milk supply becomes insufficient. The baby cries from hunger and fails to gain sufficient weight. A hungry baby like this seldom puts up any fuss over weaning to the bottle. How fast the weaning to the bottle goes will depend on how much the mother is producing.

If you find that your breast-milk supply is failing rapidly and that the baby is quite hungry, and if you have no doctor to consult, make up a complete formula from Section 52, using the one that is listed for his weight. (If he weighs over 10 pounds, start with #6.) Give him a bottle each feeding, after the breast, letting him take as much or as little of it as he wants. Omit the breast feeding at 6 P.M. Two days later omit the 10 A.M. breast feeding also. Continue to omit the remaining breast feedings, one every 2 or 3 days, in the following order: 2 P.M., 10 P.M., 6 A.M. If the formula turns out to be insufficient, change to the next larger or stronger. (If the mother's milk is decreasing only gradually and the baby is only slightly dissatisfied, it will work better to introduce the bottles one feeding at a time, as in the third paragraph below.)

But suppose there is no question of the milk supply giving out. A mother wants to nurse her baby for a few months to give him a good start, but not for most of the year. How long is it important to nurse? There's no hard and fast answer to this, of course. The physical advantages of breast milk, the purity, the easy digestibility, are most valuable to the baby at first. But there is no age when they suddenly become of no benefit. The emotional advantages of breast feeding will not cease at any definite period, either. One sensible time to wean him to the bottle is at about 3 months. By this age, the baby's digestive system will have settled down. He will be about over any tendency to colic. He will be pretty husky and still gaining rapidly. But if a mother would like to go on nursing until her baby is 4, 5, or 6 months old, or stop at 2 months, those are satisfactory times to wean, too. It is a little safer not to wean in very hot weather.

When it is planned to wean to the bottle at some age beyond 2 months, it is wiser to keep the baby accustomed to it from the age of 2 months on, by giving a bottle regularly two or three times a week, every day if you prefer.

Now in the case where the breasts have been producing a good amount of milk, the weaning should preferably be gradual from the beginning. First, omit one breast feeding a day, say at 6 P.M. and give a bottle instead. Let him take as much or as little of this as he wants. Wait 2 or 3 days until the breasts become adjusted to the change, then omit the 10 A.M. breast feeding, too, and substitute the second daily bottle. Again wait 2 or 3 days, and omit the 2 P.M. breast feeding. Now the baby will be getting the breast only at 6 A.M. and 10 P.M. and a bottle at each of the other three feedings. You will probably need to wait 3 or even 4 days each time, before omitting each of these last two nursings. Any time the breasts become uncomfortable, even though it isn't time for a scheduled nursing, let the baby nurse for a few seconds, or use manual expression or a breast pump for a few minutes, just to relieve the pressure. Then it should not be necessary to use a binder or to limit your fluids.

43. **A formula to use when weaning from the breast.** If you have a doctor, he will of course be the one to prescribe the for-

	Whole-Milk Formula			Evaporated-Milk Formula		
	Whole milk	Water	Granulated sugar	Evaporated milk	Water	Granulated sugar
For 1 bottle	4 ounces	2 ounces	2 teaspoonfuls	2 ounces	4 ounces	2 teaspoonfuls
For 2 bottles	8 ounces	4 ounces	4 teaspoonfuls	4 ounces	8 ounces	4 teaspoonfuls
For 3 bottles	12 ounces	6 ounces	2 tablespoonfuls	6 ounces	12 ounces	2 tablespoonfuls
For 4 bottles	16 ounces	8 ounces	2 tablespoonfuls & 1 teaspoonful	8 ounces	16 ounces	2 tablespoonfuls & 1 teaspoonful
For 5 bottles	20 ounces	10 ounces	3 tablespoonfuls	10 ounces	20 ounces	3 tablespoonfuls

Use Level Spoonfuls

mula, taking into account the baby's size, age, digestion, and the amount he has been receiving from the breast.

If you are unable to reach a doctor, you can try the following plan. In Section 37 is a formula for a relief bottle of 6 ounces, made either with whole or evaporated milk. Just make up the 6 ounces, no matter what size your baby is, and let him take as much or as little as he wants. See Sections 57-62 on how to make the formula. When he's ready to give up his second breast feeding make up two 6-ounce bottles, and so on, until you are making five bottles, as indicated in the chart on page 50.

You will notice that the last formula above, that gives 6 ounces in five bottles (or 5 ounces in six bottles), is the same as formula #6 in Section 52. If you get your baby completely weaned to this formula and find that he regularly needs less than this amount, you go back to formula #5 or #4 in Section 52. (They are all the same strength up through formula #6.)

If, on the other hand, you find that he is dissatisfied and hungry on #6, you can advance in two days to #7. If this still isn't enough, you can go to #8 after 2 days. The formulas from #7 to #11 get stronger, though the volume remains the same.

You may have been using fresh milk for a relief bottle and in the early stages of weaning, for the sake of convenience. When he is completely weaned, you may want to shift over to the corresponding evaporated-milk formula. This does not need to be done gradually.

44. If the baby won't take the bottle. A baby 2 months or more old who has not regularly had a bottle may balk completely. Try for a week offering him a bottle once or twice a day, before the breast or solid food. Don't force it; don't get him angry. Take it away if he refuses, and give him the rest of his meal, including the breast. In a few days' time he may change his mind. Try various sizes and shapes of rubber nipples.

If he's still adamant, omit the 2 P.M. breast feeding altogether and see if this makes him thirsty enough so that he will try the bottle at 6 P.M. If he still holds out, you will probably have to give him the breast anyway at the 6 P.M. feeding, because it will be uncomfortably full. But continue to omit the 2 P.M. nursing for several days. It may work on a subsequent day though it didn't the first.

The next thing to try is omitting every other breast feeding throughout the 24 hours (nurse at 6 A.M., 2 P.M., 10 P.M.), and hold down on the solid foods so that he's pretty hungry—or omit the solids altogether.

The only alternative left is to stop breast feeding entirely and starve him into capitulation. I put this off till the last, because it is drastic for the baby and for the mother.

The mother can use a breast pump or manual expression (Section 40) just enough to relieve the pressure and discomfort.

Bottle Feeding

FORMULAS

45. What is a formula? There is nothing mysterious about a formula. It is a mixture of cow's milk, water, and sugar. The water and sugar are put in to make the mixture more like mother's milk in composition. The cow's milk that you use may be pasteurized whole milk, or evaporated milk, or powdered milk. Each has its special advantages. A variety of sugars are used. The commonest are granulated sugar, corn syrup, brown sugar, and mixtures of dextrins and maltose.

The reason you have to sterilize carefully the ingredients and the utensils and the bottles is that germs thrive on milk, just the way babies do. If a few bacteria get into the formula when you make it on Tuesday, they may have multiplied a lot by the time the baby drinks the last of it on Wednesday, especially if the formula has not been well refrigerated in the meantime. Boiling the formula also makes it more digestible.

46. Different kinds of fresh milk. Your doctor will prescribe the best kind of milk for your baby, taking into account his particular needs and what is available. The commonest milks used in formula-making are listed for general information.

Pasteurized milk is generally the best kind of fresh milk to use for babies. In pasteurization, the milk is heated before being bottled in the dairy. This does not kill all the germs, but it kills the ones that would be most dangerous to human beings.

Certified milk is especially pure milk that meets extra-strict requirements of the state health department. It is expensive and is not necessary for most babies.

Raw milk means unpasteurized milk, just as it comes from the cow. It should be boiled for five minutes, not only for babies but for children of all ages. This is to be sure that it does not contain bacteria that cause diarrhoeas, sore throat, tuberculosis, and other infections. Raw milk from Jersey and Guernsey cows is apt to be richer in cream than ordinary commercial milk, and so may upset a baby's digestion. If you move to the country and get this rich milk, you should pour off a little of the cream, so that what's left looks about like commercial milk.

Vitamin D (pasteurized) milk is available in some localities. The amount of the vitamin may be small enough so that your doctor will prescribe a cod-liver oil preparation in addition. He will tell you whether it is worth your while paying extra for vitamin D milk.

Homogenized (pasteurized) milk means that the fat droplets in the milk have been broken up into much smaller particles, to make the fat easier to digest. It has some advantage for a baby who digests milk poorly, but is not necessary for most. It causes less scum than ordinary milk and will be helpful if you are having trouble with clogged nipples. Your doctor will tell you if he thinks your baby needs this more expensive milk.

Whole milk is an expression used in most formula making. It means to shake up the whole bottle of ordinary pasteurized milk before using any for the formula. If you leave the cream on top and only use the upper part of the bottle for the formula, it will be too rich in butter fat. On the other hand, if you take milk from a bottle from which the top cream has already been used, the formula will be too thin. You don't have to shake homogenized milk, because the cream does not separate.

Skimmed milk means milk from which the top cream has been poured off or scooped off. It is sometimes used temporarily in the treatment of diarrhoea.

47. **Evaporated milk.** Evaporated milk is canned milk from which a little over half the water has been removed. (It should not be confused with *condensed milk,* which is heavily sweetened with sugar and is not suitable for infant feeding.) The advantages of evaporated milk are several. It is thoroughly sterilized in the process of canning, so it is free of germs when you open it. It is, in most localities, cheaper than fresh milk. It can be kept indefinitely in the unopened can without refrigeration. It's the same wherever you buy it, so a baby who travels doesn't have to adjust to a different kind of milk. It is a little easier to digest than fresh milk and less apt to cause allergies like eczema.

When you have listed all these advantages, you wonder why anyone uses fresh milk for infants. The main reason is custom. People are apt to think that something that comes in a can is not so good because it isn't fresh. Evaporated milk has less vitamin C than fresh milk, but even fresh cow's milk contains very little. So we give orange juice, which contains lots of vitamin C, to all babies who are taking either evaporated or fresh cow's milk. Evaporated milk doesn't taste as good to older children and adults, but babies rarely object to changing back and forth. There is only one small practical advantage to fresh milk. When a baby is old enough to take all his milk from a cup (when you don't have to do any more sterilizing), it is easier to fill his cup from the bottle that the fresh milk comes in, than it is to mix evaporated milk with water. Aside from this, there's no reason why a child shouldn't go on drinking evaporated milk for years.

Evaporated milk is about twice the strength of fresh milk, so in making the formula, you use only half as much evaporated milk as you would if you were using fresh milk. You make up the difference with water.

There are many brands of evaporated milk. They are all of about the same composition. You do not have to worry about switching from one to the other. Some evaporated milks are "irradiated" or otherwise treated to increase the amount of vitamin D, but this may not be sufficient to prevent rickets. The doctor should decide whether your baby needs a fish-liver oil preparation in addition.

48. **Powdered milk.** Powdered whole milk is useful if you are traveling with your baby, or if you are going to live in an un-

civilized spot where you can't get evaporated or safe fresh milk. You can carry a large supply with you, and it won't weigh too much. It is more expensive than fresh or evaporated milk. You turn it back into liquid *whole* milk by mixing in the proportion of one level tablespoonful of powdered milk to 2 ounces of water. If your baby were taking a formula of 20 ounces of whole milk, 10 ounces of water, and 3 tablespoonfuls of granulated sugar, you would use 10 tablespoonfuls of powdered milk. You mix this with 30 ounces of water (20 ounces to bring it to whole-milk strength, 10 more ounces for formula) and 3 tablespoonfuls of sugar. The last column in the formula chart in Section 52 lists powdered whole-milk formulas.

You boil the required amount of water, and dissolve the sugar in it. When this has cooled at least to body heat, place the powder on top and beat it in with a sterilized fork or egg beater.

Powdered milk should be kept in the icebox after the can has been opened.

We have been talking about powdered *whole* milk. There are other varieties of powdered milk in which the proportions of the different elements have been changed. The latter should only be used under a physician's supervision.

49. **Lactic-acid milk.** Lactic-acid milk is a sour milk. It can be made in two ways. In a commercial dairy or in a formula room in a hospital, they put lactic-acid bacilli into pasteurized milk. The bacilli produce the lactic acid, which sours the milk.

The other way is to add the chemical *lactic acid* to the milk. This can be done in the home.

Lactic-acid milk is more easily digested by some babies than ordinary sweet milk. Doctors often prescribe it for those who have painful indigestion, or who vomit a lot, or who have a tendency to diarrhoea. Some doctors prefer to use it routinely for all babies.

Lactic-acid milk is a little tricky to make in the home. The three important things are to have the milk and water well chilled, to acidify the milk very gradually, and not to get the milk too hot after it is acidified. You boil your milk in one saucepan, cool it, then chill it in the icebox. In a separate saucepan boil your water and sugar, then cool and chill it. Now add one teaspoonful of "U. S. P. Lactic Acid" to the water and sugar.

(This is usually the amount used for a total formula of 24 to 30 ounces. For a smaller formula use proportionately less.) Now add the acidified water to the milk very slowly, stirring constantly. If someone can help you, have her pour the acidified water into the milk while you stir continually with an egg beater. You are trying to avoid getting too much acid in any one part of the milk, because that would make a large, tough curd, which won't go through the nipple. That's why you add the acid to the water first, so that it will be diluted before it touches the milk. If you have a formula calling for just milk and sugar, no water, I would add the lactic acid to 1 or 2 ounces of water anyway, before adding it to the milk.

When you come to warm the bottle for the baby, don't heat it too rapidly, or too hot. Do it in a pan of warm water. If you prepare lactic-acid milk carefully, the curds will be fine enough to go through the ordinary-sized nipple holes. If necessary, enlarge the nipple holes.

You can buy prepared whole lactic-acid milk in some large cities. It is usually quite expensive. You can also buy it in powdered form, through your druggist. In using it in a formula, you will add water and sugar, the same way as in a sweet-milk formula.

50. Sugars for the formula. The doctor will prescribe the sugar that he thinks best for your baby. The usual sugars are listed here.

Ordinary granulated sugar (cane sugar) is most commonly used in formula making, because it is cheap, available, and usually satisfactory.

Brown sugar is the unrefined form of cane sugar. It is useful when the baby's stools are too dry and firm. A tablespoonful has the same food value as a tablespoonful of granulated sugar.

Corn syrup contains a mixture of sugars and dextrins. A dextrin is halfway between a sugar and a starch. In the intestine it is only slowly converted into sugar, so there is less sugar in the intestine at any one time to make gas. That's why a dextrin mixture is thought to be better for a baby who is forming lots of gas, or has a tendency to looseness. However, it can be used for babies with good digestions, too. It is inexpensive. The same number of tablespoonfuls are used as of granulated sugar.

Dextrin and maltose preparations are much like corn syrup, except that they are in powder form and more expensive. A tablespoonful contains only half as much nourishment (calories) as granulated sugar. Therefore, if you are changing, you use 2 tablespoonfuls of a dextrin and maltose preparation in place of 1 tablespoonful of granulated sugar.

Lactose is the sugar that naturally occurs in human and cow's milk, is satisfactory for formulas, but expensive. 1½ tablespoonfuls equal 1 tablespoonful of granulated sugar.

51. Weakening the formula temporarily. (Directions for those who cannot consult a doctor. If you can reach a doctor, he is the one to advise you about *any* changes.) The formula may be weakened temporarily, for example, if a baby is having a spell of indigestion or mild diarrhoea, or if he is being weaned suddenly from breast to cow's milk, or if a newborn baby is finishing only about half of each bottle.

To weaken a formula to three-quarters strength. If the regular formula is already in the bottles, shake each one, and pour off one quarter of the formula from each bottle. You would pour off ¾ ounce from a bottle containing 3 ounces of formula, 1 ounce from a 4-ounce formula, 1¼ ounces from a 5-ounce formula, 1½ ounces from a 6-ounce formula. (Save some of the formula you have poured off, in a spare sterilized bottle, in case you want to give an extra bottle. This one should be weakened too.) Boil some water in a saucepan and pour into each bottle the same amount of water as the formula you removed. For example, if you poured off 1½ ounces from a bottle containing 6 ounces of formula, you would put back 1½ ounces of boiled water.

If you are just making up the formula, make it the usual way, but when you get ready to fill each bottle put in only three quarters of the usual quantity (2¼ ounces if the usual amount was 3 ounces, 3 instead of the usual 4, 3¾ instead of the usual 5, 4½ instead of the usual 6. Add boiled water to make up the difference. For example, if you usually put 5 ounces in each bottle, you will instead put in 3¾ ounces of formula, add 1¼ ounces of boiled water.) You will have more than enough formula left over in your quart measure or saucepan to make an extra bottle in case of need.

To weaken a formula to half strength. If the bottles have already been filled with the usual formula, shake each one, pour off half the quantity, add an equal amount of boiled water. Make one or two extra bottles with the formula you are pouring off. (The rest you will throw away.) If you are just making the formula do it the usual way, but put only half the usual amount into each bottle, add an equal amount of boiled water. For instance, if you usually have 5 ounces of formula in each bottle, put in only 2½ ounces of the usual formula and add 2½ ounces of boiled water. Make one or two extra bottles, weakened the same way, and discard the rest of the formula which still remains in the saucepan or quart measure.

This method of weakening a formula may sound wasteful, but it's safer than getting all mixed up in more complicated arithmetic. Besides it's convenient to have an extra bottle or two of formula. A baby whose formula has been weakened may suddenly get very hungry.

FORMULAS TO USE IF IT'S IMPOSSIBLE TO CONSULT A DOCTOR

52. Using this formula chart. In the next pages are formulas for parents who are completely unable to consult a doctor about a baby's feeding. If you are able to bring your baby to a private doctor, a clinic, a baby health station, or to have the help of a district nurse, they will prescribe formulas on the basis of his age, weight, rate of gain, and digestion. That is the only sound way to decide on the right formula. If you are completely out of reach and if your baby is healthy and normal, you can probably make out with the formulas in this book and a little common sense.

The different formulas are each given a number in *Column A* so that they can be referred to easily. Column A also gives the volume of the total formula, to help you find the right one in case you know the total volume your baby needs; and it gives the approximate weight of the baby who is apt to be satisfied by that particular formula. This is not to be taken exactly. One 7-pounder will want more than another. It is just to give you a rough idea of what formula to start with. If you find that your baby wants more, change to the next larger formula. If he leaves

½ ounce or more in every bottle, move back to the next smaller formula. The formulas listed are generous for most babies. Your baby is more apt to need less rather than more.

Column B shows how the total formula can be divided up. The 5-pound baby taking a total of 15 ounces is most likely to be on a 3-hour schedule during the day and a 4-hour one at night, making 7 bottles of about 2 ounces each. If he still needs to be fed every 3 hours at night, it means about 1¾ ounces in 8 bottles. And if, as is very unlikely, he is willing to go 4 hours day and night, each of the 6 bottles will contain 2½ ounces. If your baby is unusually hungry at one feeding every day and leaves some at all the other feedings, you can put an extra half ounce in one bottle, which you get by skimping a little on the others.

The next column, labeled C, gives a series of evaporated-milk formulas. *Column D* lists the corresponding formulas made with whole milk. The formulas from #1 to #6 are all the same strength; they merely increase in volume. The young baby, up to about 10 pounds, gradually needs a larger amount, but the same strength is usually satisfactory. The formulas from #7 to #11 stay at the same volume, but the concentration of the milk increases. Babies, as they get beyond 10 pounds, are still apt to be wanting more to eat from time to time, but in most cases it's better not to increase the total volume beyond 30 ounces. A larger amount may fill the baby's stomach so full that he won't have room for solid foods.

Column E is only meant to be used in case you need to change from granulated to another sugar. If your baby is constipated and you change to brown sugar, you will see from column D that the amount to be used is just the same as the amount of granulated you used previously. If you are changing from granulated sugar to a maltose and dextrin preparation, you will, as you see, use double the amount of sugar. *Column F* gives the corresponding powdered whole-milk formulas, in case you ever have to make that change for traveling without being able to consult a doctor.

53. **Example: feeding a seven-pound newborn baby.** Say you have decided ahead of time that you will not be breast-feeding your baby. He has just been born and weighs about 7 pounds (between 6½ and 7½ pounds). You are able to buy

A	B	C	D	E Other Sugars (if used instead of granulated)		F Powdered Whole Milk Formulas		
Formula number	**How to divide the formula**	**Evaporated milk** formulas using granulated sugar	**Whole milk** formulas (Use pasteurized milk if you can.)	Brown Sugar or Corn Syrup	Dextrin and Maltose Prep.	Powdered Whole Milk	Water	Granulated Sugar
#1 Total 15 ounces Usually plenty for a **5-pound** baby. If not, go to the next	2 ounces in 7 bottles *or* 2½ ounces in 6 bottles (Or 3 oz. in 5 bottles, for example, to supplement the breast for a larger baby.)	**evap. milk** 5 ounces **water** 10 ounces **gran. sugar** 1 tablesp. and 1 teasp	**whole milk** 10 ounces **water** 5 ounces **gran. sugar** 1 tablesp. and 1 teasp.	1 tablesp. & 1 teasp.	3 tablesp.	5 tablesp.	15 ounces	1 tablesp. & 1 teasp.
#2 Total 18 ounces Usually plenty for a **6-pound** baby. If not, go to the next	2½ ounces in 7 bottles (every 3 hours by day, every 4 hours at night), *or* 3 ounces in 6 bottles (every 4 hours day and night)	**evap. milk** 6 ounces **water** 12 ounces **gran. sugar** 1 tablesp. and 2 teasp	**whole milk** 12 ounces **water** 6 ounces **gran. sugar** 1 tablesp. and 2 teasp	1 tablesp. & 2 teasp.	3 tablesp. & 2 teasp.	6 tablesp.	18 ounces	1 tablesp. & 2 teasp.
#3 Total 21 ounces Usually plenty for a **7-pound** baby. If not, go to the next	3 ounces in 7 bottles, *or* 3½ ounces in 6 bottles, *or* 4 ounces in 5 bottles if off 2 A.M. feeding.	**evap. milk** 7 ounces **water** 14 ounces **gran. sugar** 2 tablesp.	**whole milk** 14 ounces **water** 7 ounces **gran. sugar** 2 tablesp.	2 tablesp.	4 tablesp. & 1 teasp.	7 tablesp.	21 ounces	2 tablesp.
#4 Total 24 ounces Usually plenty for an **8-pound** baby. If he needs more, go to the next.	4 ounces in 6 bottles, *or* 4¾ ounces in 5 bottles	**evap. milk** 8 ounces **water** 16 ounces **gran. sugar** 2 tablesp. and 1 teasp	**whole milk** 16 ounces **water** 8 ounces **gran. sugar** 2 tablesp. and 1 teasp	2 tablesp. & 1 teasp.	4 tablesp. & 2 teasp.	8 tablesp.	24 ounces	2 tablesp. & 1 teasp.
#5 Total 27 ounces Usually plenty for a **9-pound** baby. If he needs more, go to the next.	4½ ounces in 6 bottles, *or* 5½ ounces in 5 bottles	**evap. milk** 9 ounces **water** 18 ounces **gran. sugar** 2 tablesp. and 2 teasp	**whole milk** 18 ounces **water** 9 ounces **gran. sugar** 2 tablesp. and 2 teasp	2 tablesp. & 2 teasp.	5 tablesp. & 1 teasp.	9 tablesp.	27 ounces	2 tablesp. & 2 teasp

#6 Total 30 ounces Usually plenty for a 10-pound baby. If he needs more, go to the next.	5 ounces in 6 bottles, *or* 6 ounces in 5 bottles, *or* 7½ ounces in 4 bottles	evap. milk 10 ounces water 20 ounces gran. sugar 3 tablesp.	whole milk 20 ounces water 10 ounces gran. sugar 3 tablesp.	3 tablesp.	6 tablesp.	10 tablesp.	30 ounces	3 tablesp.
#7 Total 30 ounces The weight is unimportant now. Increase when he is hungry	5 ounces in 6 bottles, *or* 6 ounces in 5 bottles, *or* 7½ ounces in 4 bottles	evap. milk 11 ounces water 19 ounces gran. sugar 3 tablesp.	whole milk 22 ounces water 8 ounces gran. sugar 3 tablesp.	3 tablesp.	6 tablesp.	11 tablesp.	30 ounces	3 tablesp.
#8 Total 30 ounces	6 ounces in 5 bottles, *or* 7½ ounces in 4 bottles	evap. milk 12 ounces water 18 ounces gran. sugar 3 tablesp.	whole milk 24 ounces water 6 ounces gran. sugar 3 tablesp.	3 tablesp.	6 tablesp.	12 tablesp.	30 ounces	3 tablesp.
#9 Total 30 ounces	6 ounces in 5 bottles, *or* 7½ ounces in 4 bottles	evap. milk 13 ounces water 17 ounces gran. sugar 3 tablesp. (This is a good place to stop for an evaporated milk formula, because it uses just a can of milk. If you need it stronger, go on.)	whole milk 26 ounces water 4 ounces gran. sugar 3 tablesp.	3 tablesp.	6 tablesp.	13 tablesp	30 ounces	3 tablesp.
#10 Total 30 ounces	6 ounces in 5 bottles, *or* 7½ ounces in 4 bottles	evap. milk 14 ounces water 16 ounces gran. sugar 3 tablesp.	whole milk 28 ounces water 2 ounces gran. sugar 3 tablesp.	3 tablesp.	6 tablesp.	14 tablesp.	30 ounces	3 tablesp.
#11 Total 30 ounces	6 ounces in 5 bottles, *or* 7½ ounces in 4 bottles	evap. milk 15 ounces water 15 ounces gran. sugar 3 tablesp.	whole milk 30 ounces water 0 ounces gran. sugar 3 tablesp.	3 tablesp.	6 tablesp.	15 tablesp.	30 ounces	3 tablesp.

Use Level Spoonfuls. Read Section 52 before using this chart.

either evaporated or pasteurized milk, so you choose evaporated because it is safer, more easily digested, cheaper. The chart suggests starting with formula #3. Assume, to begin with, that he will be willing to last 4 hours between feedings; then you will need 6 bottles, each containing 3½ ounces. (If it turns out that he has to be fed about every 3 hours in the daytime, you will need 7 bottles, which will then each contain 3 ounces. In that case he will probably lengthen out to 4 hours in a couple of weeks.) The first few days he will probably be taking only part of each bottle, but he will gradually increase.

Let's say that about 2 weeks after he is born he's finishing the 3½ ounces in each bottle and sometimes looking around for more. Now it's time to change to formula #4 which provides 4 ounces in each of 6 bottles. Perhaps 10 days later he gives up his 2 A.M. bottle; so now you divide the 24-ounce total into 5 bottles, each containing about 4¾ ounces.

These same directions will serve for a mother who has tried to breast-feed the baby, but finds at the end of 5 days that she's producing almost no breast milk, or who finds after 2 weeks of trying hard that she is not producing nearly enough to satisfy the baby. In either case she may decide to give up breast feeding altogether and want a full formula.

54. Where you stop increasing. A baby is apt to want increases in his formula fairly frequently and regularly in the first couple of months, when he is gaining most rapidly. Then he is satisfied with the same formula for longer and longer periods. When he is around the age of 3 months, solid foods are started, and these help to take care of further increases in his appetite.

If your baby has gotten up to formula #9 or #10 or #11 by the time he is well started on solid foods, you can leave his formula at that strength indefinitely. His milk needs will be well covered by the 26 or more ounces of whole milk he is receiving. Formula #9 is the most convenient place to stop with an evaporated-milk formula, because it uses just a can of milk, which is equivalent to 26 ounces of whole milk.

55. The baby who is satisfied indefinitely on a dilute formula. If your baby is one with a small appetite, who by 4 or 5 months is taking fair amounts of solid food three times a day, hasn't wanted any increase in his formula for a month or more,

and yet has only reached formula #6, for example, should you leave him on this dilute formula indefinitely? It is a little safer to increase gradually the proportion of milk to make sure that his calcium needs are covered. But if you increase the strength of the formula to #7, and #8, and so on, he may just leave more in the bottle, or cut down on his solid food, since he is showing that he is getting as much nourishment as he wants already. The way to get around this is to cut down the amount of sugar in the formula as you increase the proportion of milk. One teaspoonful of granulated sugar or brown sugar or corn syrup has about the same number of calories as an ounce of whole milk, or half an ounce of evaporated milk. So, if your baby is on a whole-milk formula, remove a teaspoonful of sugar (2 teaspoonfuls if a maltose and dextrin preparation) and an ounce of water, say every other day, and substitute an ounce more of whole milk, until you are up to 30 ounces of milk and no water. (There may or may not be any sugar left in the formula at the end, depending on which formula you started with.) If your baby is on an evaporated-milk formula, you will remove a teaspoonful of granulated sugar (or brown sugar or corn syrup) and *half* an ounce of water every other day and substitute a *half* ounce of evaporated milk, until you are up to 13 ounces of evaporated milk.

56. The baby who seems to want to go beyond formula #11. If you have a very hungry baby who has worked up rapidly to formula #11 and seems to want more before the age of 3 months, the best way to satisfy him is to start solid foods early (at 2½ or 2 months, for instance).

The reason you much prefer not to go beyond a formula like #11 is that the baby who gets used to very large amounts of formula is more likely to balk at solid foods or at least never become really keen about them.

If you have the exceptional baby who demands more than formula #11 but who, for some reason, can't start solid foods yet (or, at least, can't take enough solids to satisfy him), you can increase to 35 ounces of whole milk (or 17 ounces of evaporated milk and 18 ounces of water) and 3½ tablespoonfuls of granulated sugar. This will provide 7 ounces in each of 5 bottles or about 9 ounces in 4 bottles. If you *have* to go further still,

you can give 40 ounces of whole milk (or 20 ounces of evaporated and 20 ounces of water) and 4 tablespoonfuls of sugar. This will provide 8 ounces in 5 bottles or 10 ounces in 4 bottles.

But it's much better not to go beyond a total of 30 ounces.

PREPARING THE FORMULA

57. Preparing the bottles and equipment. The bottles will be easier to wash if you rinse each one in cold water and fill it with cold water after the baby has used it. This keeps the traces of milk from caking on the sides. Rinse the nipple right after use, also. Squeeze some cold water through the nipple holes.



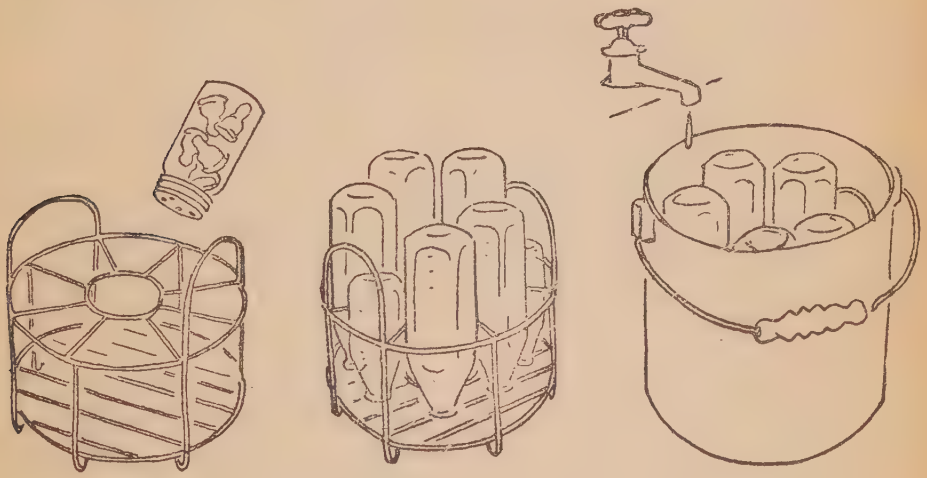
It doesn't matter what hour of the day you sterilize the bottles and prepare the formula. Most mothers do it before the



9:30 A.M. bath or right after the 10 A.M. feeding. At first you will find it a long and fussy job. But with a little practice you can cut the time at least in half.

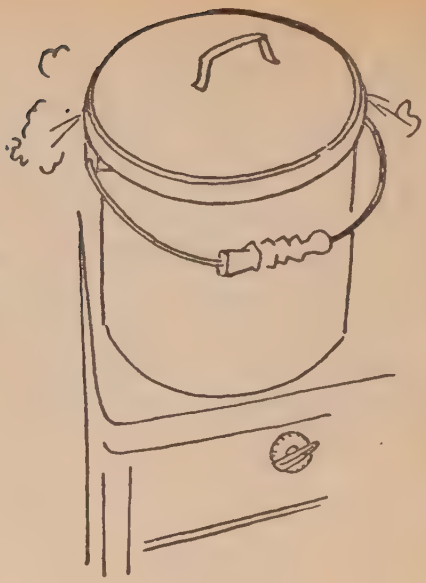
First wash the bottles with hot water, soap, and a bottle brush. Rinse them. Do the same with the nipples and bottle caps or nipple covers.

Place the nipples in the nipple jar, put on the perforated cover, and place the nipple jar, upside down, in the center compartment of the wire rack. Stack the bottles upside down in the rack, placing any small bottles next to the rack handles. Put about 2 inches of hot water in the bottom of your sterilizing

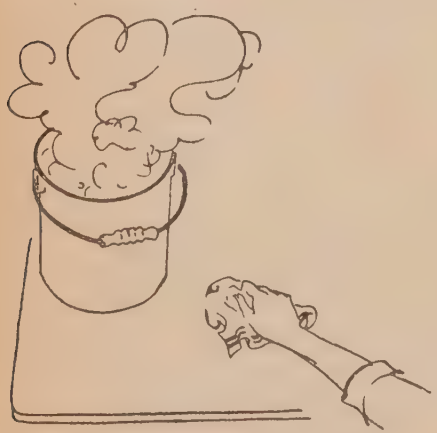


pail. Put in the full bottle rack. If there are no compartments left for your orange-juice and water bottles, lay them on their sides on top of the other bottles. Now fit in the funnel, strainer, bottle caps or nipple covers, and the bottle tongs. Put on the cover and boil vigorously for at least 5 minutes. You can be starting on your formula while the water is boiling.



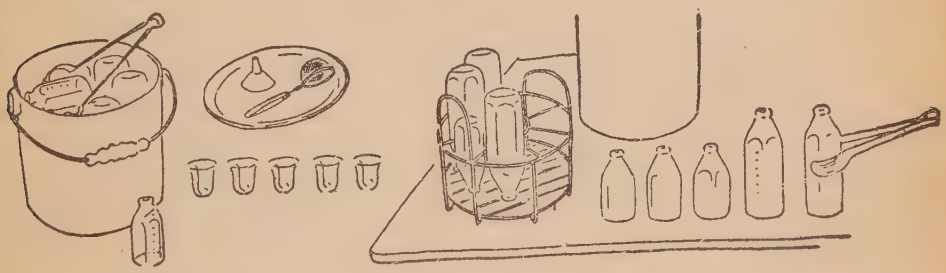


When the sterilizing pail has boiled for 5 minutes, put it on or near the table where you will bottle the formula. Take the cover off. Wait for it to cool enough so that you can get hold of the tongs without burning yourself. Wash the top of the table with soap. With the tongs, take out the things which are loose on top of the rack, placing them on the table. Place the strainer and funnel on the under side of the pail cover for extra cleanliness. Then lift out the rack containing the rest of the equipment. Do not touch with your hands the necks of the bottles, the inside of the bottle caps or nipple covers, or the parts of the funnel and strainer that will come in contact with the milk.



If you find that you have difficulty getting the bottle caps or nipple covers out of the sterilizer without dropping them on the floor, you may want to boil them in a separate clean saucepan (with a cover for draining).

58. To save nipples. It's discouraging to finally get a set of rubber nipples that work just right, and then have them turn soft and sticky after a few days. All the time that nipples are wet, particularly when they are in hot water or steam, they are spoiling at a more rapid rate. If you sterilize and dry them quickly they will last many times as long. If you are sterilizing them in a jar with the rest of the equipment, fit them in with their necks up. Don't boil the sterilizing pail for more than 5 minutes. When you remove the jar, set it upside down in a position so that all the water will drain out. (Some of the punch holes in the top should be near the edge.) As soon as it has stopped draining shake it briskly, turn it right side up, and remove the lid so that it can dry inside.



If you can afford an extra saucepan, especially after you have learned to prepare the equipment and formula without confusion, I would suggest that you sterilize the nipples separately, in a saucepan with cover that you use just for them. After you have washed the nipples, wait until the saucepan is boiling before you put them in. Boil for only 3 minutes. Drain immediately and remove the cover so that they will dry while they are still hot. When they and the saucepan are completely dry, replace the cover and keep them there until you use them. Now get back to the formula.

59. Making the formula. There are various ways to make the formula, with advantages and disadvantages to each. It's mostly a matter of what your doctor recommends, and what you get used to.

One method is to mix and boil the formula in an enamel-ware quart measure (marked off in ounces inside). Then you don't need to bother with a measuring cup. However, you can get

along almost as easily with an ordinary saucepan, using a measuring cup marked off in ounces to measure the water and milk with. (You can even use one of the baby's bottles for measuring, but it is hard to pour into.)

This method of boiling the formula right over the flame, in a quart measure or saucepan, is a quick method. But if you are absent-minded and let things boil over, you may prefer to cook the formula in a double boiler. (I'll mention that method later; also the method of sterilizing the formula *after* it's put up in the bottles.)



If you are going to use whole milk that is not homogenized, shake the bottle vigorously upside down until the cream is well mixed in. Suppose your formula calls for 14 ounces of whole milk, 7 ounces of water, and 2 level tablespoonfuls of granulated sugar. Now, you will need an extra 2 or 3 ounces of water beyond what your formula calls for, to allow for evaporation during boiling. The amount depends on how long you boil, how hard you boil, and the shape of your container. Try 2 ounces and see how it works.



Measuring, mixing, and boiling in a quart measure.

Put the right amount of water in the quart measure or saucepan—let's say 7 ounces for the formula, 2 ounces for evaporation. (In a measure that brings the level up to the 9-ounce line.) Add 2 level tablespoonfuls of sugar (use a measuring tablespoon and scrape it level with a knife). Put the measure or saucepan over the flame, stir till the sugar dissolves. (Sugar dissolves faster in water than in milk.) Then add the 14 ounces of milk. (In the measure that will bring the level of the formula up to the 23-ounce line.) When the formula boils, turn down

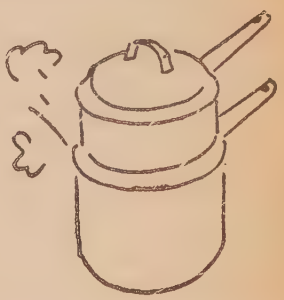
the flame or move to a less hot part of the stove so that it just simmers, for 3 minutes (stir constantly). Then take it off the stove.



Measuring with a cup, boiling in a saucepan.

Keep the stirring spoon in the formula so it won't touch anything unsterilized.

You may prefer a *double boiler.* It's a little slower, but there's no danger of boiling over. You prepare the formula just as it is described above, but you use the top of the double boiler instead of an ordinary saucepan. The formula in the top should be at the steaming or simmering stage for a full 5 minutes. How long it takes to get the formula heated up to that point will depend on the shape of your double boiler, how much water you put in the bottom, and how hot your stove is. The whole business will take at least 15 minutes. You won't have to allow water for evaporation in a double boiler with a cover.



60. **Bottling the formula.** It is a good idea to cool the formula a little before bottling it, to prevent breakage of bottles and to avoid scum that clogs the nipple holes. Place the measure or saucepan containing the hot formula in a larger vessel containing cold water, and stir. You don't have to cool it very much; the scum only forms near the boiling point. Don't have the faucet running—you don't want unsterilized water to splash into the formula. If you have heat-resistant bottles and have no trouble with scum, omit this step.



If scum has formed, remove it with the stirring spoon. Then pour the correct amount of formula into each of the bottles through a strainer and funnel. If you are using rubber bottle caps, put them on now, being careful not to handle the neck of the bottle or the inside of the cap. If you are using glass nipple covers, you first put on the nipples. Handle the nipple by the rim so that you do not touch the inside or the part that will go in the baby's mouth. If you are using bottles with plastic caps, put each nipple in upside down, and screw the cap on.

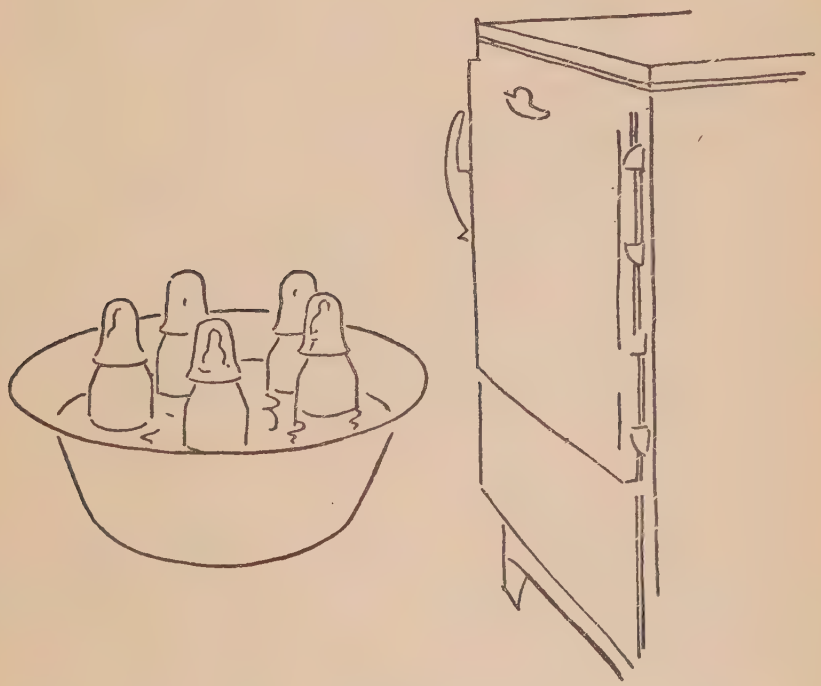


Brace bottle against abdomen. Hold far side of nipple firmly in place with left index finger. Pull free edge of nipple to the right, then down and around to the left.

Cool the bottles in water before putting them in the refrigerator, to save ice or electricity. If you have no refrigerator, they should be kept in the coolest place you can find. They should, of course, not be allowed to freeze.

61. The method of sterilizing the formula in the bottles. This seems like an easier method to some people. The main difficulties are from scum which clogs the nipples, unless you take precautions, breakage of bottles, and milk which sticks to the inside of the bottles and is hard to scrub off.

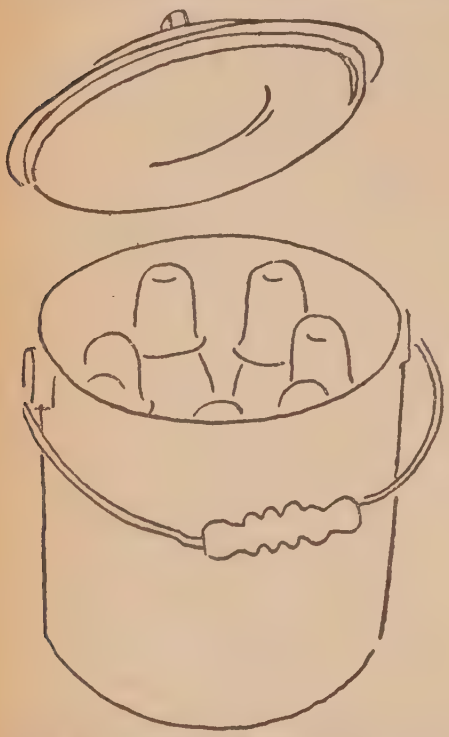
Boil the nipples and nipple covers (or bottle caps) in a saucepan.



Mix the ingredients in a measure or saucepan. The bottles, well washed but not sterilized, are filled with the correct amount of formula and capped loosely with nipple covers or bottle caps. Leave plastic caps partly unscrewed. If you use rubber caps, make an air passage by tucking a wisp of sterile cotton under the side of the cap. Otherwise they may pop off on heating. Don't put the nipples themselves on before boiling, because this will spoil them too rapidly.

Place the bottles upright in a bottle rack in the sterilizing pail. Pour in enough water around the bottles to cover up to where the milk is. Boil for 15 minutes.

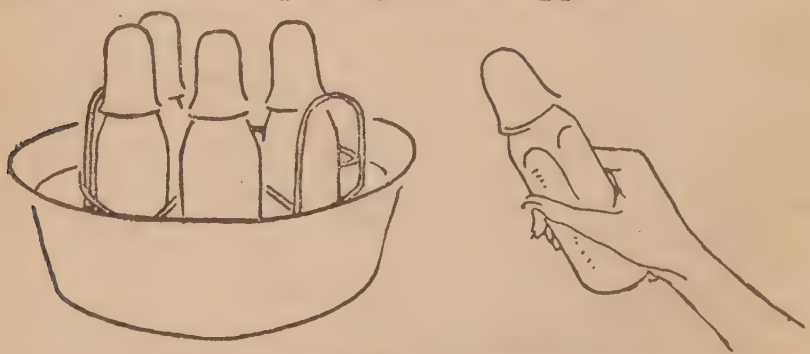
To avoid scum, use homogenized milk, cool the bottles quickly by standing them in cold water, and shake each one occasionally the first few minutes of cooling. If scum still is troublesome, you can make a "strainer" for each bottle out of a



Boil 15 minutes in water up to level of milk.

Mix formula without boiling, put it into well-washed but unsterilized bottles. Cap bottles. (Nipples should not be on bottles during this long boiling.)

small, fresh piece of fine sterile gauze, which you stretch over the bottle neck before putting on the nipple.



Shake at beginning of cooling to lessen scum.

62. **Making an evaporated-milk formula.** I will first tell you the least fussy method. You mix the ingredients and then boil the whole formula, just as if you were making a formula out of whole milk (Section 59). You can mix and boil in a quart meas-



The simplest way to make an evaporated-milk formula, in a quart measure.

ure; or measure with a measuring cup and mix and boil in a saucepan or double boiler. It is quicker to boil directly over an open flame, but if you are absent-minded you may prefer the double boiler.



Same, measuring with a cup and boiling in a saucepan.

The method of not boiling the evaporated milk. This is another method, a little more fussy, but with practical advantages. You boil the water and sugar first, *then* add the evaporated milk, taking care not to add any germs at the same time. There are two advantages to not boiling the milk: it won't boil over, and the milk won't stick to the bottom of the pan.

Evaporated milk is sterile when it's in the can. However, you can get germs in it when you open the can, when you pour it over the edge of the can, or if you measure it in a cup which

hasn't been freshly sterilized after using it to measure the water. You get around these risks as follows.

Put the water required for the formula, and for evaporation, in the measure. If you are using a saucepan instead of a measure, measure the water with a measuring cup, and then sterilize the measuring cup by putting it in the sterilizing pail along with the bottles; or, if more convenient, boil it in a separate pan. A can opener or punch should be sterilizing, too. Now to get back



The method of boiling the water but not the evaporated milk, in a quart measure.

to the formula—add the sugar to the water, bring it to a boil, and simmer for 3 minutes. Scrub the top of the can of evapo-

rated milk with soap and water, then pour boiling water over it. The easiest way to open the can (with the sterilized instrument) is by two punch holes on opposite sides of the top, one to let the milk out, the other to let air in. Add the required amount of evaporated milk to the measure or saucepan (in the latter case using the freshly sterilized measuring cup). Mix.



Same, using a measuring cup and saucepan.

When the baby gets up to a whole can of evaporated milk, you won't need the sterilized measuring cup to measure the milk.

Saving the unused evaporated milk. When you use less than a full can of evaporated milk, you can save what is left for the next day. Leave it in the can and cover the top with a fresh piece of waxed paper held with a rubber band to keep bacteria, molds, and dust particles from drifting in. Keep the covered can in the icebox, and use it all up the next day.

63. **Frozen milk.** Milk that has been delivered frozen should preferably not be used, because it spoils easily. If it is necessary to use it, boil it for 4 or 5 minutes before using it for babies or small children.

64. **If you cannot keep the formula cold.** If you ever get into a situation where you can't keep the baby's bottles cold until

feeding time, for instance if your refrigerator stops working, you will be pretty safe if you heat each bottle to the boiling point before giving it. Put the bottle in hot water, bring to a boil, boil 10 minutes, then cool it down to body temperature before giving it.

GIVING THE BOTTLE

65. The first few days. Usually the first bottle is offered about 12 hours after the baby is born, though it can be started earlier if he seems hungry. The baby is apt to want little the first few feedings. Even if he takes only half an ounce, don't try to get more into him. It's often 3 or 4 days before he wants the amounts you expect him to need, and it may take a week or more. Don't worry; it may be better for his digestion to start gradually. He'll find out what he needs when he comes more to life in a few days.

66. Warming and giving the bottle. Shake the bottle when you remove it from the icebox, to mix the cream. You can warm the bottle in a saucepan or pitcher of hot water, or in a wash basin. It is more convenient, if there's no hot water near the baby's room, to use an electric or a chemical bottle warmer. Most babies like the formula at just about body heat. The best way to test this is to shake a few drops onto the inside of your wrist. If it feels hot, it is too hot. Sit in a comfortable chair and hold the baby cradled in your arm, just as in breast feeding.

Keep the bottle tilted up, so that the nipple is always full. Most babies will want to work steadily until they have taken all the formula they need. There are some, though, who swallow a lot of air during nursing, and if the air bubble in the stomach gets too big, they feel uncomfortably full and stop nursing in the middle of the bottle. If this happens, bring up the bubble (see Section 70) and go on with the feeding. Some babies need to be bubbled two or even three times in the course of a bottle —others not at all. You will soon find out which type your baby is.

As soon as your baby stops nursing and seems satisfied, let that be the end of the feeding. He knows better than anyone else how much he needs.

67. Making the nipple holes right. If the nipple holes are too small, the baby will get too little and become tired long be-

fore he's finished. If they are too large, he may choke or get indigestion; in the long run he will get too little sucking satisfaction and try to suck his thumb. For most babies the right speed is when it takes about 20 minutes of straight sucking time. The holes are generally right for a young baby if, when you turn the bottle upside down, the milk comes in a fine spray for a second or two and then changes to drops. If it keeps coming in a spray, it is probably too fast. If it comes in slow drops from the beginning, it is probably too slow.

Many new nipples are too slow for a young baby but are right for an older, stronger one. If they are too slow for your baby, enlarge them carefully as follows: Stick the dull end of a fine (No. 10) needle into a cork. Then, holding the cork, heat the needle point in a flame until it's red-hot. Stick it a short distance into the top of the nipple. You don't have to poke it into the old hole. Don't use too large a needle or poke it in too far, until you can test your results. If you make the holes too large, you'll have to throw the nipple away. You can make one, two, or three enlarged holes. If you have no cork, you can wrap a piece of cloth around the dull end of the needle.

68. **Don't urge the baby to take more than he wants.** The main trouble with bottle feeding, to my mind, is that the mother can see how much formula is left. Some babies always want the same quantity at every feeding of the day. But there are others whose appetites are much more variable. You mustn't get the idea that your baby has to have a certain amount at each feeding. It may help you to have a more relaxed feeling about this to realize that a breast-fed baby may get as much as 10 ounces at the 6 A.M. nursing and as little as 4 ounces at the 6 P.M feeding and be perfectly happy with each. If you can trust a breast-fed baby to take what he needs, you can trust a bottle-fed baby, too.

It is necessary to make this point because quite a number of children become feeding problems. They lose the natural appetite that they were born with and balk at all or many of their foods. These problems develop, in nine out of ten cases, because the mother has been trying, sometimes since infancy, to get her child to eat more than he wants. When you urge a baby or a child to take a few more mouthfuls than he is eager for, it looks to you as if you had gained something. But this isn't so. He will

only cut down at his next feedings. He knows the amounts and he even knows the different kinds of foods that his body is calling for. Urging your child isn't necessary, doesn't get you anywhere. It is harmful because it begins, after a while, to take away his appetite, and makes him want to eat *less* than his system really needs.

In the long run, urging does more than destroy appetite and make a thin child. It robs him of some of his positive feeling for life. A baby is meant to spend his first year getting hungry, demanding food, enjoying it, reaching satisfaction—a lusty success story, repeated at least three times a day, week after week. It builds into him self-confidence, outgoingness, trust in his mother. But if mealtime becomes a struggle, if feeding becomes something that is done *to* him, he goes on the defensive and builds up a balky, suspicious attitude toward life and toward people.

I don't mean that you have to snatch the bottle away for good the first time your baby pauses. Some babies like to rest a bit several times during a feeding. But if he seems indifferent when you put the nipple back in his mouth (and it's not due to a bubble) then he's satisfied, and you should be, too. You may say "If I wait 10 minutes he'll sometimes take a little bit more." Better not.

What about the baby who goes to sleep after he's taken 4 of his 5 ounces and then wakes up and cries 15 or 20 minutes later? This is more apt to be due to an air bubble or indigestion than to hunger. A baby won't notice a difference of an ounce, especially if he's gone to sleep. In fact, a baby will often sleep just as well when he's taken only half his usual amount, though he may wake a *little* early.

It's perfectly all right to occasionally give your baby the rest of the formula a little later, if you feel sure that he's hungry for it. But I think it's better not to get into a regular habit of splitting the bottle into two courses, with a nap between.

69. **The young baby who only half finishes** (if you cannot consult a doctor). A mother may bring a baby home from the hospital and find that he stops taking his bottle and falls asleep when it's still half full. Yet they said in the hospital that he was taking it all. The mother keeps trying to rouse him, to wedge

another quarter of an ounce in, but it's slow, hard work. What's the trouble? He may be a baby who hasn't quite "come to" yet. (An occasional baby stays sluggish like that for the first 2 or 3 weeks and then comes to life with a bang.) Or perhaps his digestion is slow getting straightened out.

The constructive thing to do is to let the baby stop when he wants to, even if he's only taken 1½ ounces. Won't he get hungry then, long before it's time for the next feeding? He may. If he does, feed him. "But," you say, "I'd be feeding him all day and night." It probably won't be that bad even at first. The point is that if you let a baby stop when he feels like it, and let him come to feel his own hunger, he will promptly become more eager for his feedings and take larger amounts. Then he will be able to sleep for longer periods. Within a few days, certainly within a couple of weeks, an average-sized baby will be eating well and willing to sleep about 4 hours.

What happens if you keep urging him to finish? There's a chance that he'll go right on being indifferent and balky.

What to do with the half-finished bottle? It's not good practice generally to use a bottle over again, especially if it's been out of the icebox for a long time. Bacteria will be multiplying in it all the time it's warm. But there's very little risk if you pop it right back in the refrigerator as soon as he's stopped taking it; and this is what I would suggest doing for a few days until he gets straightened out.

If his appetite doesn't begin to improve in a few days and he's still taking altogether only about half of his formula, and if you have no doctor to advise you, you can dilute his formula in half for 3 or 4 days (Section 51). Then when he gets hungry, increase to ¾ strength for a few days. When he's dissatisfied with that, go back to his full-strength formula.

70. **Getting up the air bubble.** All babies swallow some air while they are drinking their milk. It collects as a bubble in the stomach. One baby's stomach becomes uncomfortably full before he is halfway through his feeding and he has to stop. Another never swallows enough to interrupt his meal. You get the bubble up by holding him up against your shoulder and massaging or patting him in the middle of the back. It's a good idea to put a diaper over your shoulder in case he spits up a little.

One kind of stomach lets go of the bubble very easily and promptly. The other kind seems to want to hang on. When the bubble doesn't come up easily, it sometimes helps to put him in a lying position for a second and then bring him back to your shoulder again.

You need to "bubble" your baby in the middle of a feeding only if he swallows so much air that it stops his nursing. But you should at least try to get the bubble up at the end of the feeding. Most babies will become uncomfortable in a little while if put to bed with the bubble still in the stomach. Some babies even get colic pains from it. On the other hand, if your baby is hard to bubble and if he always seems just as comfortable whether he has burped or not, then there is no need for you to try for more than a few minutes.

Adding Vitamins and Water

START VITAMIN D EARLY

71. Cod-liver oil prevents rickets. Before your baby is a month old, preferably by 2 weeks, he should be taking some form of vitamin D. Your doctor is the one to advise you about this. How much your baby needs depends on several things. The ultraviolet light which is part of sunshine makes vitamin D in the fat in the baby's skin. Therefore, the baby who is born in summer in the country, or who lives in a southern climate, gets more vitamin D from sunshine and needs less in his diet. In cities the soot and dust in the air shut out a lot of the ultraviolet light. So do ordinary window glass, clothing, and dark skins. (That is why Negroes and babies of Mediterranean stock are more apt to have rickets when they live in less sunny climates.) Premature babies need extra vitamin D, because they haven't

had a chance to inherit much from their mothers, and because they grow so fast.

The job of vitamin D is to see that the calcium, which the baby gets in his milk, is absorbed from the intestines, carried through the blood, and deposited in his rapidly growing bones. If there isn't enough vitamin D to do this job right, the newly formed bone is soft, something like the cartilage in your ear. This is called rickets. It may make a soft skull or a "pigeon-breasted" chest, or make the lower ribs flare out, like the roof of a pagoda. If a baby has rickets after he's learned to stand, it may give him knock-knees or bowlegs. It can make the muscles flabby and cause potbelly.

The best known source of vitamin D is cod-liver oil, but some brands are very rich in it and some are poor. A good brand states on the label the number of vitamin D units, or says that it meets "U. S. P." (government) requirements. U. S. P. cod-liver oil contains at least 85 units of vitamin D in each gram (¼ teaspoon). Doctors, at the present time, believe that the average healthy baby should get at least 400 units each day, and they usually give 1000 to play safe. 3 teaspoonfuls of U. S. P. cod-liver oil a day will take care of this.

You start cod-liver oil gradually, so that the baby's stomach will get used to it. Give it at the end of feedings. One way is to give 3 drops three times a day the first day; 6 drops three times a day the second day; 9 drops three times a day the third day. Keep on increasing *each day* until he is up to *a whole teaspoonful three times a day*. Drop the oil into a teaspoon and let the baby suck it off the tip of the spoon, if he is willing. This is better, if it works, than emptying the spoon into his mouth while he is lying down, which is more apt to make him choke. The best time is at the end of the 10 A.M., 2 P.M. and 6 P.M. feedings.

Cod-liver oil is not always easy to give. Lots of babies in the early weeks get to hate it as soon as the dose is up to a quarter of a teaspoonful. They ooze it out, or they spit it out, or they cough it out. You can't tell how much the baby has kept down, and, anyway, you hate to make him angry. Some babies take it all right but keep vomiting it afterwards.

72. **Other fish oils may be easier to give, in drops. There are**

nowadays many preparations made from the liver oils of fish which contain very large amounts of vitamin D. They have various trade names but are often referred to as "concentrated" fish oils. These preparations contain in the neighborhood of 10,000 units of vitamin D per gram, or 220 units per drop. This is over 100 times as concentrated as U. S. P. cod-liver oil. 5 drops will give 1000 units a day, if the baby gets every drop. Doctors often prefer to give 10 drops for extra safety. Premature babies need more.

Your doctor will tell you whether he recommends one of these preparations for your baby. If you have no doctor to advise you, start with one of these preparations rather than with plain cod-liver oil. (Be *sure* it contains 8000 to 10,000 units of vitamin D per gram if you are following these directions.) Your baby will be much more apt to take it willingly. It sounds expensive when you buy it, but a small bottle will last much longer than a large bottle of cod-liver oil. The day-to-day expense is no greater. When you buy one of these concentrated preparations, buy the 50 or 60 cc. bottle. It is much more economical this way than in a 5 cc. bottle. Price different brands that have about the same strength of vitamin D. They are equally good, but vary in cost.

Give the number of drops your doctor recommends, once a day, at the end of any one feeding. Drop into a demitasse spoon or small teaspoon, and let the baby suck it off the tip. What's left on the spoon should be scooped off on his upper lip, to make sure that he gets it all. If your baby fights against the drops, you can get around him by giving it directly into the corner of his mouth, from the dropper, while he is taking the bottle or breast. You must find out the exact point on your dropper where the right number of drops will come, and test this every week. Otherwise you will find that you are gradually increasing the dose. Another good way to give fish-oil drops is floating on half a teaspoonful of orange juice. Don't put fish-oil drops in a bottle of milk—too many drops are left sticking to the sides.

Viosterol is a different kind of vitamin D preparation. It is made by shining an ultraviolet lamp on a certain vegetable oil. Plain viosterol is usually not the doctor's first choice, because it does not contain the *vitamin A* which the fish-liver oils have,

and because it is artificially made. However, it is very useful for a baby who refuses to take the fishy tasting oils. It contains 10,000 units per gram, so the dose is usually the same as the strong fish oils (5 to 10 drops).

Because of the shortage of the concentrated fish-liver oils due to the war, most firms have combined them with viosterol to stretch the supply. This makes a good preparation.

Crystalline vitamin D comes in a preparation which will dissolve in water or milk. It is useful when a baby is refusing to take a fish-liver oil *or* viosterol. It is also used for very small babies, when the doctor wants to be sure that there is no choking on an oily preparation. The usual dose is 5 drops daily, dissolved in the baby's formula. Some will be lost if the baby is regularly leaving part of his formula.

73. **How long to keep up vitamin D.** In *summer* if your baby or child is getting *lots* of sunshine, the doctor may recommend cutting down or even stopping the fish-liver oil for the very hot months. This is not because the oil is "too heavy" or indigestible, but because sunshine manufactures vitamin D in the skin. It is safer to keep a *small* dose of oil going all summer, because otherwise a certain number of children will lose their taste for it and refuse it in the fall. Cut cod-liver oil to 1 teaspoonful a day, a concentrated oil to 3 drops, *if* the doctor thinks the baby is getting enough good sunshine. If he's in the shade all day or in a sooty city, you can't count on the sun.

The danger of rickets gradually lessens as a child grows older. It is definitely advisable to keep up vitamin D until he has reached his full growth in adolescence. It's positively dangerous to the health of his bones and teeth to omit it, or to give it irregularly, during his first 2 years. If an older child turns against a fishy oil, you can give it in a capsule or change to viosterol.

VITAMIN C

74. **Orange or tomato juice, or a vitamin C medicine.** A breast-fed baby receives a good supply of vitamin C from his mother, *if* she is taking a diet that includes raw fruits and vegetables. Cow's milk contains very little vitamin C, even when it is raw. When it is pasteurized or boiled or evaporated, the heat

destroys part of that little. *All* babies who are living on a formula need extra vitamin C. Otherwise, they will get a disease called scurvy. The gums swell and bleed, and there are painful hemorrhages around the bones.

Orange juice is rich in vitamin C. This is the easiest and most natural way to give it to a baby. It is usually started before he is a month old, unless the doctor has a special reason for postponing it. But wait until he has had his fish-liver oil a couple of days. Then, if he gets upset, you will know which caused it. Orange juice is usually mixed with an equal amount of boiled water in the early weeks, so that it won't taste too strong. One way is to start with ½ teaspoonful of orange juice and ½ teaspoonful of water. The next day, give 1 teaspoonful of orange juice and 1 teaspoonful of water. The third day, 1½ teaspoonfuls of each. And so on, up to an *ounce of each.* Then gradually decrease the water and increase the orange juice, until you are giving *2 ounces of straight orange juice.* You strain the orange juice, so that the pulp won't clog the nipples. The baby takes it from the bottle. Orange juice is often given before the baby's bath, because this is a time when he is always awake for about an hour before his next feeding. It is better to prepare it shortly before giving it, since it loses some of its vitamin C on exposure to the air. You can give it at room temperature, or slightly warmed. Don't get it hot. Heat detroys vitamin C.

Most babies love orange juice and digest it easily. Some young babies always vomit it. An occasional baby seems to be made uncomfortable by it. Very rarely a baby gets a real rash from it. However, it's a mistake to stop the orange juice every time a baby gets a few spots or pimples. Minor skin rashes are very common in the early weeks and months, but rarely have anything to do with orange juice. Very few babies dislike it at first, but some turn against it later. If, for any of these reasons, your baby can't take orange juice, you can use tomato juice or vitamin C medicine. Tomato juice does not contain as much vitamin C as orange juice, so you have to work up to twice as much: 4 ounces of tomato juice. If this is too much at one time, give 2 ounces twice a day. Unfortunately, if a baby is upset by orange juice or dislikes it, he usually is upset by or dislikes tomato juice, too.

Vitamin C medicine, called *ascorbic acid,* comes in drops and tablets. A baby would need 50 milligrams daily. It can be dissolved in one of his bottles, just before giving it to him. Or it can be dissolved in the total formula *after* it has cooled. Don't put it in before boiling, because heat destroys it.

Even if your baby can't take orange juice at first, you can try it again every month. When he can take it all right, increase it gradually as above. But don't stop the ascorbic acid medicine until the baby is getting 2 ounces of orange juice daily.

DRINKING WATER FOR A BABY

75. Some want water; others don't. It is often recommended that a baby be offered a few ounces of water between meals, once or twice a day. It is not absolutely necessary, because the amount of fluid in the formula is probably calculated to satisfy the baby's ordinary needs. It is more important to offer water during excessively hot weather, or when the baby has a fever. Babies who ordinarily refuse water often take it at these times.

As a matter of fact, a lot of babies don't want any water from the time they are a week or two old until they are about a year. This is the age period when they fairly worship anything with nourishment in it, but they feel insulted by plain water. If your baby likes it, by all means give it to him once or several times a day when he is awake between meals (not just before the next meal). You can give him as much as he wants. He probably won't want more than 2 ounces. But don't urge him to take water if he doesn't want it. There's no point getting him mad. He knows what he needs.

If your baby takes water, boil for 3 minutes a sufficient quantity for the day, keep it in a sterilized bottle. When you need some, pour it into another bottle, which you then warm like a bottle of milk.

Boil the water that your baby drinks through the first year anyway, and through the second year also if you aren't sure that the water from your faucet or well is absolutely pure.

76. You don't have to boil everything. You sterilize the formula and all the equipment that comes in contact with it because germs multiply in milk. You boil drinking water because there is a chance that harmful germs will get into the reservoir,

or well, or into your pipes through faulty plumbing. Sometimes mothers get so scared by the care that they take in preparing the formula and drinking water that they think they have to sterilize everything that goes into the baby's mouth. You don't have to be so fussy with all the other things that your baby will eat and drink. You don't have to boil dishes and cups and feeding spoons, because germs don't get a chance to grow on clean, dry utensils. It's sensible to wash the outside of the baby's orange, since it may have been recently handled by someone with a cold. There's no need to sterilize the knife you cut it with. Germs won't multiply in orange juice that a baby is going to drink 10 minutes after it is squeezed.

Daily Care

THE BATH

77. Giving the bath. It's usually most convenient to give the bath before 10 A.M. feeding in the early months, but before any feeding is all right (not after his feedings, because you want him to go to sleep then). By the time your baby is on three meals a day you may want to change to before lunch or before supper. As the child gets older still, and stays up for a while after supper, it may work out better to give the bath after supper, especially if he needs his supper early.

If you give him his orange juice before the bath, it will keep him from getting too hungry. Bathe him in a warm room, the kitchen if necessary. The bath can be given in a washbowl, a dishpan, or an enamel-ware tub. Most convenient is the fabric tub on high legs. The water should be about body temperature (90-100 degrees). A bath thermometer is a comfort to the inexperienced mother, but is not necessary. Test the temperature with your elbow or wrist. It should feel comfortably warm. You can use any kind of mild soap. Use only a small amount of water

at first, until you get the knack of holding the baby securely. A metal tub will be less slippery if you line it with a diaper each time. Hold the baby so that his head is supported on your wrist, and the fingers of that hand hold him securely in the armpit.



Your thumb around his left upper arm, your wrist supporting his head.

Wash his face first, with a soft washcloth, without soap. The scalp needs to be soaped only once or twice a week, if the baby doesn't spit up too much. Then soap and rinse the rest of the body. If you feel nervous at first about dropping him in the water, you can do all the first part of the washing while he is in your lap or on a table. If so, do it quickly, so that he won't get cold. Then rinse him off in the tub, holding him securely with both hands. Use a soft bath towel for drying him, and blot rather than rub. If you begin giving the tub bath before the navel is completely healed, dry it thoroughly after the bath with sterile cotton. Most babies, after a few weeks' experience, have a wonderful time in the bath, so don't rush it. Enjoy it with him.

Between 1 and 2 years a child may become frightened of the bath, either from slipping under the water, or getting soap in his eyes, or even from seeing and hearing the water going down the drain. To avoid soap in the eyes don't have the hair so wet that water is running down when you are soaping it. If the child is afraid to lean back for rinsing, make a dam across his forehead with one hand while you pour water from a cup with the other. If he becomes afraid to get into the bathtub, don't force him at all. You can try a dishpan, but if he's afraid of that, give him a sponge bath for months—until he gets back his courage. Then start with an inch of water and remove him before you pull the stopper.

If your baby, toward the end of the first year, begins to fight having the food washed off his face and hands with a cloth after meals, set a pan of water on the tray in front of him, and let him dabble his hands while you wash his face with your wet hand.

78. **Ears, eyes, nose, mouth, nails.** You only need to wash the outer ear, not the canal. Wax is formed in the canal to protect and clean it. Tiny, invisible hairs keep slowly moving the wax and any dirt that it has collected toward the outside.

The eyes are bathed constantly by the steady flow of the tears (not just when the baby is crying). This is why it is unnecessary to put any drops in the eyes while they are healthy.

The nose also has a beautiful system for keeping itself clear. Tiny, invisible hairs in the cells lining the nose keep moving the mucus and dust down toward the front of the nose, where it collects on the large hairs near the opening. This tickles the nose and makes the baby sneeze or rub the collection out. When you are drying the baby after the bath, you can gently wipe out the ball of dried mucus and dust with the corner of the washcloth or with cotton on the end of a toothpick. Don't fuss at this too long if it makes him angry.

The mouth ordinarily needs no extra care.

The nails can be easily cut while the baby sleeps.

79. **Oil or powder?** It's fun to oil or powder a baby after his bath, and the baby likes it, too, but neither is really necessary in most cases. (If it were, nature would provide it.) Powder is helpful if the baby's skin chafes easily. It should be dusted on

thinly, so that it won't form lumps. Any baby powder or plain talcum is satisfactory. (Don't use zinc stearate powder, which is irritating to the lungs.) Oil is a good idea if the baby's skin is dry or when he has a slight tendency to diaper rash. You can use mineral oil (liquid petrolatum) or any of the commercial baby skin oils (which are medicated, scented mineral oil).

80. The navel. When the baby is still in the mother's womb, he is nourished through the blood vessels of the umbilical cord. Just after birth, the doctor ties it and cuts it off close to the baby's body. The stump that's left withers and eventually drops off. This usually happens before the baby is old enough to leave the hospital, but occasionally not until later. When the cord falls off, it leaves a raw spot which takes a number of days to heal over. This spot should be kept clean and untouched, so that harmful germs will not infect it. If it is kept dry, a scab covers it until it is healed. It is usually recommended that the baby not be given a tub bath until the navel is completely healed, but this rule is not essential if one is careful. If the rest of the baby's body is given an oil or sponge bath, the unhealed navel is wiped with alcohol on a piece of sterile absorbent cotton, then covered with a square pad of gauze held in place by a binder. It is wise to keep the diaper below the level of the unhealed navel, so that it won't keep it wet.

If the baby is given a tub bath before the navel is completely healed, the navel should be dried completely with sterile cotton, wiped with alcohol, and covered by a sterile gauze square and binder.

If the unhealed navel becomes moist and discharges, it should be protected more carefully from constant wetting by the diaper, and cleaned each day with alcohol. The doctor may recommend touching it with an antiseptic powder or powdered alum which will hasten the drying and healing. If the navel and the surrounding skin become red, there is infection present and you should get in touch with your doctor right away. Until you can reach him you should apply continuous wet dressings. (Section 457.)

81. The soft spot or fontanel. The soft spot on the top of a baby's head is where the four pieces of bone that make up the top of the skull have not grown together yet. The size of the fon-

tanel at birth is different in different babies. A large one is nothing to worry about, and it's bound to be slower to close than a small one. Some fontanels close as early as 9 months and slow ones not till 2 years. The average is 12 to 18 months.

If a baby is not receiving enough vitamin D from a fish-liver oil, it will delay the closing of the fontanel, whatever its size to start with.

Mothers sometimes worry unnecessarily about the danger of touching the soft spot. Actually it is covered by a membrane almost as tough as canvas, and there is very little risk of hurting a baby there.

CLOTHING, FRESH AIR, AND SUNSHINE

82. Coverings and room temperature. The hardest question for a doctor to answer, in a book or in his office, is how much covering to put on a baby. All he can give are some rough guides. A baby under 5 pounds hasn't a very good system for keeping his body at the right temperature. Keeping him warm is discussed in Sections 468 and 471. Between 5 and 8 pounds he doesn't usually need to be heated from the outside. He can take care of himself in a comfortable room, say 68 to 72 degrees, with one or two light wool blankets, and his cotton sleeping clothes.

By the time he weighs 8 pounds, his heat regulator is working well, and he is getting a layer of fat that helps him stay warm. Now his room for sleeping can, and probably should, be allowed to go down to 60 degrees in cool or cold weather.

It isn't necessary to try to get a baby's sleeping room below 60 degrees (which is mildly cold), and some people advise against it because of the risk of his becoming uncovered and chilled, or of heavy coverings getting over his head. At 60 degrees he probably will need a sweater to keep his shoulders warm, and 2 or 3 layers of light wool blanketing.

A room temperature of 68 to 72 degrees for eating and playing is right for babies weighing over 5 pounds, just as it is for older children and adults. In such a room he will need to be wrapped in a thin blanket, and perhaps wear a thin sweater, at least while he is small.

Babies and children who are reasonably plump need less covering than an adult. More babies are overdressed than underdressed. This isn't good for them. If a person is always too warmly dressed, his body loses its ability to adjust to changes. He is *more* likely to become chilled. So, in general, put on too little rather than too much and then watch the baby. Don't try to put on enough to keep his hands warm, because most babies' hands stay cool when they are comfortably dressed. Feel his legs or arms or neck. Best guide of all is the color of his face. If he is getting cold, he loses the color of his cheeks, and he may begin to fuss too.



When putting on sweaters and shirts with small openings, remember that a baby's head is more egg-shaped than ball-shaped. Gather the sweater into a loop, slip it first over the back of the baby's head, then forward, stretching it forward as you bring it down past the forehead and nose. When taking it off, pull the baby's arms out of the sleeves first. Gather the sweater into a loop as it lies around his neck. Raise the front part of the loop up past his nose and forehead (while the back of the loop is still at the back of his neck), then slip it off toward the back of his head.

83. **Practical and safe coverings.** It is better to use all-wool blankets. They give the most warmth with the least weight. Best of all are the knitted ones (shawls). They wrap more easily when the baby is up, and because they are thinner, you can adjust the amount of covering to the temperature more exactly than with thick blankets. Avoid coverings that are heavy and relatively airtight, such as solid-feeling quilts.

All blankets, quilts, sheets, should be large enough to tuck securely under the mattress, so that there is no danger of their coming loose and working up over the baby's head. Waterproof

sheets and pads should either be large enough to tuck in securely or should be pinned or tied down at all corners so that they will not come loose. The mattress should be firm and flat enough so that the baby's face cannot get down in a hole. A carriage mattress should fit well, so that there is no space around the edge in which he might be wedged. Use no pillow in crib or carriage.

A cap in which to sleep should be of knitted wool, so that if it slips over the baby's face he can breathe through it. Fancier caps are all right when the mother is with the baby.

There are different kinds of sleeping bags for the purpose of keeping a small child down in bed and under the covers. Most of them tie to the sides of the bed and some of them close tight at the neck with a zipper. They are very convenient, but I would not recommend them, for two reasons. There is a slight danger in any arrangement that holds him around the neck. And some psychologists have wondered if it might cramp a child's spirit and his sense of bodily freedom to spend so much of his early formative period tied down, helpless, and immobile. It seems better to me to give the baby the benefit of the doubt.

However, you can use a bag which reaches up to the baby's armpits and is pinned snugly around him. A sweater or two will keep his shoulders warm. When he gets to the standing age, he can stand up and still be well covered. You can make a roomy bag from an old blanket. Leave the lengthwise seam open in its upper third. Then you can wrap the two flaps snugly across his back and pin them in two places close to his shoulder blades where he can't get at them. In very cold weather use two bags.

84. **Fresh air.** A baby should get plenty of fresh air. That's easy to say, hard to specify exactly, and harder still for the mother to carry out. Babies, like older children and grownups, who are outdoors a good part of every day look more healthy, have better appetites, have more protection against chilling.

Let's say, to start the discussion, that it would be good for every baby weighing 10 pounds or more to be outdoors, when it isn't raining, for 2 or 3 hours a day, as long as the temperature is above freezing and the wind isn't bitterly cold. An 8-pounder can certainly go out when it's 60 degrees or above. The temperature of the air is not the only important factor. Moist, cold air

near the ocean is much more chilling than dry air of the same temperature, and wind is the greatest chiller of all. Even when the temperature is below freezing in the shade, a 12-pound baby can be comfortable in a sunny, sheltered spot for an hour or two.

You might ask why I am making such a fuss about cold air. It is because there are some mothers who hardly ever take their babies outdoors from the beginning to the end of winter. Either they hate cold weather themselves, or they are needlessly fearful that the baby cannot stand it. Worse still, there are babies who spend the whole winter, asleep as well as awake, in a warm room. They show the effects of it in their pasty complexions and languid appetites.

In winter the best time to have the baby out is in the middle of the day (between the 10 A.M. and 2 P.M feedings in the early months). If you live in the country or have your own yard, you can put him out for longer than 3 hours in reasonable weather. Let the sun fall on his face for a short time, if this does not make him uncomfortable (see Section 85 on sun-bathing).

If you live in a city and have no yard to park the baby in, you will be pushing him in a carriage. Long woolen underwear, slacks, woolen stockings, and galoshes will make your life a lot more pleasant during this period. If you enjoy being out and can afford the time, the more the better.

In summer, if your house gets stifling hot and you can find a fairly cool place outdoors, the longer the baby stays out the better. If your house stays cool, I would still try to have the baby out for a couple of hours a day, but do it in the first part of the morning and the end of the afternoon.

When your baby first goes on three meals a day, you may need to shift the hours outdoors somewhat to suit your and his convenience. But the general principle of trying to get him out for 3 hours a day remains the same. As he gets nearer to a year old, he will get more interested in his surroundings. He may refuse to go to sleep after lunch if he is being pushed around in his carriage. Then you will have to let him have his nap in his crib after lunch. That leaves very little of the afternoon for an outing, especially in winter. You might keep him out for 2 hours in the morning and an hour in the afternoon. The part of the morn-

ing when you take him out will also depend on when he takes his morning nap. Some babies in the last part of the first year fall asleep right after breakfast, others not until the end of the morning. If your baby won't sleep while he is outdoors, you will have to fit in the outings when he is awake.

85. **Sunshine and sun baths.** Direct sunshine contains ultra-violet rays which create vitamin D right in the skin. There may be other beneficial effects of sunshine which have not yet been discovered. So, on general principles it's sensible for babies and children to be in the sun for part of the time. There are three cautions. Exposure to sunshine should be increased very gradually to avoid burns, especially where the sun is hot and the air is clear. Secondly, excessive exposure is probably unwise even when the skin has been gradually tanned. The reason the skin becomes tanned is to protect the body from the effects of too much sun. In other words, the body can't use more than a moderate amount, and excessive amounts may be harmful to the skin itself. Thirdly, a severe sunburn is just as dangerous as a heat burn. When you put a baby out to sleep in a carriage you must take into account how much sunshine he will get on his skin, especially if you are putting him in a new spot in a season when the sun is bright.

In summer you can begin exposing the baby's body to the sun as soon as the weather is warm enough, and as soon as he weighs about 10 pounds. This means that he is plump enough so that he won't get chilled when he is partly undressed outdoors. In cooler weather you may be able to expose his legs alone. You will have to wait longer to expose his face, until his eyes are no longer bothered by the bright light. This varies in different babies. When you do expose his face, turn him so that the top of his head is toward the sun. Then his eyebrows will shield his eyes.

In winter you can give him sun baths at an open window, if the room is warm enough and the wind does not blow on him. If you cannot open the window, the baby may get other unknown benefits of sunshine through the glass.

Begin with 2 minutes and increase the exposure gradually—2 more minutes each day is fast enough. Divide the time between back and stomach. I wouldn't suggest going beyond 30

or 40 minutes of full exposure, especially in summer. In warm weather it is important that the baby shouldn't get overheated during his sun bath. Put him on a table or on a pad on the ground where the air will cool him, not down inside a bassinet or carriage.

When the sunshine is intense, as at the beach, a baby should be in the shade *all* the time the first day or two, because even then he may get enough reflected glare to give his tender skin a burn. A baby old enough to sit up and crawl around needs a hat at the beach or any equally sunny place.

SLEEP AND PLAY

86. How much should a baby sleep? Mothers often ask this question. Of course, the baby is the only one who can answer it. One baby seems to need a lot, and another surprisingly little. As long as a baby is satisfied with his feedings, comfortable, gets plenty of fresh air, and sleeps in a quiet, cool place, you can leave it to him to take the amount of sleep he needs.

Most babies in the early months sleep from feeding to feeding, if they are getting enough to eat and not having indigestion. There are a few babies, though, who are unusually wakeful right from the beginning, and not because anything is wrong. If you have this kind of baby, there's nothing you need to do about it.

As your baby gets older, he will gradually sleep less and less. You're apt to notice it first in the late afternoon. In time he will become wakeful at other periods during the day. Each baby develops his own pattern of wakefulness, and tends to be awake at the same time every day. Toward the end of his first year, he will probably be down to two naps a day; and between 1 and 1½ years, he will probably give up one of these. It is only during infancy that you can leave the amount of sleep entirely up to the baby. A child by the age of 2 is a much more complicated being. Excitement, worries, fear of bad dreams, competition with a brother, may keep him from getting the sleep he needs.

87. Going to bed. It is preferable to get your baby used to the idea that he always goes to bed and to sleep right after a meal. (An occasional baby won't fall into this pattern but insists on being sociable after his meals.) It is well also that he be ac-

customed to falling asleep in his own bed, without company, at least by the time any 3 month colic is over. Occasionally a very determined type of baby, whose mother has gotten in the habit of rocking him to sleep in her arms to avoid any crying, will gradually learn to fight off sleep for hours to avoid being put down. It's better to let such a baby cry for 10 or 20 minutes for a few nights than to get into such a chronic struggle. If he's the unusual type who, left in his crib, would cry more and more hysterically for an hour or two, it will be safer in the long run, if it works, to rock him to sleep in a carriage than in your arms. When a teething baby wakes regularly during the night it's wiser, if it works, to comfort him in his bed than to get him used to being picked up.

Some say it's a little safer for a baby to sleep on his back in the first 6 months, so it's better to get him used to that position if you can. There is only one slight disadvantage. A baby on his back tends to turn his head always toward the same side and this may flatten the back of his head on that side. This won't hurt his brains, and the head will gradually straighten out as he grows older. If you start early, you may be able to get him used to turning his head to both sides by putting his head where his feet were, every other sleeping period. Then if there is one wall he likes to look at he will have to turn his head in each direction half the time. If you have a baby who insists on sleeping on his stomach, the thing to avoid is heavy blankets and quilts, especially if they are not well tucked in. (See Section 83.)

88. Out of the parents' room by 6 months if possible. A child can sleep in a room by himself from the time he is born, if convenient, as long as the parents are near enough to hear him when he cries. If he starts with his parents, 6 months is a good age to move him. He has the strength to take care of himself pretty well, and he won't have set ideas yet about where he wants to be. It is preferable that he not sleep in his parents' room after he is about 12 months old. Otherwise there is a chance that he may become dependent on this arrangement and be afraid and unwilling to sleep anywhere else. The older he is, the harder it may be to move him.

Another trouble is that the young child may be upset by the parents' intercourse, which he misunderstands and which

frightens him. Parents are apt to think there is no danger if they first make sure the child is asleep. But children's psychiatrists have found cases where the child awakened and was much disturbed without the parents' ever being aware of it. However, the risk of a child's becoming dependent or upset if he continues to sleep in the parents' room is not so great that the parents should worry when no other sleeping arrangement is possible.

Whether a child should sleep in a room by himself or with another child is largely a practical matter. It's fine for each to have a room of his own, if that's possible, especially as he grows older, where he can keep his own possessions under control and have privacy when he wants it. The main disadvantage of two young children in the same room is that they are apt to wake each other up at the wrong times.

Sometimes, when a small child is going through a period of waking up frightened at night—perhaps coming repeatedly into the parents' room, perhaps crying persistently—the parents take him into bed with them so that they can all get some sleep. This seems like the most practical thing to do at the time, but it usually turns out to be a mistake in the end. Even if the child's anxiety improves during the following weeks, he is apt to cling to the security of his parents' bed, and there is the devil to pay getting him out again. In the long run, it's more practical for the parent of the frightened child to bundle up in blankets and sit by his bed, even for an hour in the middle of the night if necessary. I think it's a sensible rule not to take a child into the parents' bed for any reason (even as a treat when the father is away on a business trip).

89. **Being companionable with your baby.** Be quietly friendly with your baby whenever you are with him. He's getting a sense of how much you mean to each other all the time you're feeding him, bubbling him, bathing him, dressing him, changing his diapers, holding him, or just sitting in the room with him. When you hug him or make noises at him, when you show him that you think he's the most wonderful baby in the world, it makes his spirit grow, just the way milk makes his bones grow. That must be why we grownups instinctively talk baby talk and waggle our heads when we greet a baby, even grownups who are otherwise dignified or unsociable.

One trouble with being an inexperienced parent is that part of the time you take the job so seriously that you forget to enjoy it. Then you and the baby are both missing something.

Naturally I don't mean that you should be talking a blue streak at him all the time he's awake, or constantly joggling him, or tickling him. That would tire him out, and in the long run would make him tense. You can be quiet nine tenths of the time you are with him. It's the gentle, easygoing kind of companionship that's good for him and good for you. It's the comfortable feeling that goes into your arms when you hold him, the fond peaceful expression on your face when you look at him, and the gentle tone in your voice.

Young babies begin waking earlier and earlier at the end of the afternoon and this is the time they usually want more sociability. A few prefer another time of day. You don't have to pick your baby up just as soon as he wakes, but you can talk to him when you pass his crib. When he becomes restless you can put him on a bed or sofa where he can see more of you and the world. When he begins to be bored and fussy, you can pick him up and hold him until you get ready to feed him.

90. Can you spoil a baby? Not by feeding him when he's hungry, comforting him when he's especially miserable, being sociable with him in an easy going way. Generally speaking, a baby who gets extra attention when he's uncomfortable is perfectly willing to do without it when he feels well. (For rare exceptions see Sections 87 and 101.)

Spoiling mostly comes if an older baby is fussed over when he doesn't need any attention. You can see spoiling in its simplest form if the mother of a 9-month-old baby goes away for a 2-weeks' trip and leaves him in charge of a friendly but overeager neighbor or relative, who can't leave him alone for a minute. Even though he's playing happily on the floor by himself, she keeps picking him up, joggling him on her knee, carrying him around, talking to him, inventing new games to play, poking new toys at him. At the end of 2 weeks' time, he's forgotten how to amuse himself and feels lost and unhappy when left alone. No great harm has been done, but his mother will have a few difficult days when she takes over again.

Here's another example. A worrisome mother is completely wrapped up in her baby. She has no outside interests or pleasures, doesn't keep up her friendships. She just hovers over her child. Every time he peeps, she jumps to see what's the matter. When he gets to the creeping and climbing stages, she can't take her eyes off him. As soon as he pulls himself up to a standing position, she leaps to his side. When he climbs onto a box, she doesn't give him a chance to get himself off again, but lifts him down right away.

A baby who is fussed over this way comes to demand constant attention; after a while he whines and whimpers just as soon as he climbs onto anything; he seems to absorb some of his mother's tenseness and uneasiness.

You can add it all up by saying that a child at any age must have loving people to depend on and things to do. But the older he grows, the more he's able to find them when he needs them. At 6 months his mother has to think of putting a rattle in his hand; otherwise he'd never get it. At 18 months he wants to think up his own games. At 3 months he's dependent on her for affection, has to wait until she feels like coming to him and smiling. At 2 years he's able to look her up when he feels sociable. At 4 months his mother's baby talk is wonderful for him; but if she's still doing it at 3 years, it will be hampering his development. Fussy, worrisome attention is bad at all ages. Spoiling is also discussed in Sections 87, 101, 259, 274, 382, 488.

91. Kissing and germs. Don't be afraid to kiss your baby when you feel like it. It's better not to kiss him on the mouth, or blow in his face.

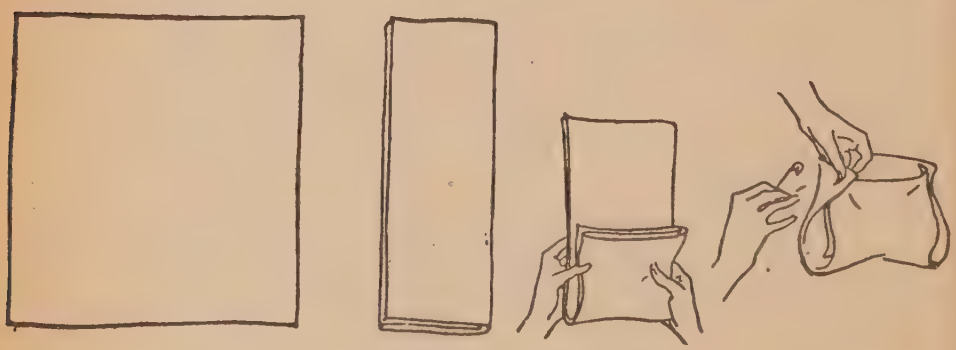
Kissing brings up the subject of germs. There are germs everywhere, but especially in people's throats and on their hands. Most of them are relatively harmless. A baby will gradually pick up and carry in his own nose and throat the germs of the people who are taking care of him. The important thing is not to give him too many new, bad germs at one time. That is why you should be careful if you feel a cold or sore throat or any other kind of illness coming on, no matter how slight. It's in the earliest stages of colds and sore throats, when the symptoms are very mild, that the germs are most easily spread. Be fierce about keeping outsiders with colds away from the baby.

You certainly don't have to worry about germs when the baby's putting household objects like spoons, teething rings, clothes in his mouth. Even if there are germs on them from his sucking them before, they are his own germs and won't hurt him.

DIAPERS

92. Diapering. How to fold a diaper depends on the size of the baby and of the diaper. The only important things in putting it on are to have the most cloth where there is the most urine, and not to have too much diaper bunched between the legs. With a full-sized newborn baby and the usual large diapers, you can fold as in the pictures. First fold lengthwise so that there will be three thicknesses. Then fold about one third of the end over. As a result, half of the folded diaper will have 6 layers, the other half 3 layers. A boy needs the double thickness in front; a girl, in back, if she lies on her back. When you put in the pin, slip two fingers of the other hand between the baby and the diaper to prevent sticking him.

Ordinarily, it's sufficient to change the diapers when you pick the baby up for his feeding and again before you put him back



One method of folding a diaper. Imagine a baby in the last picture.

to bed. Most babies are not bothered by being wet. But a few are extra sensitive and have to be changed more often. If a child has sufficient covers over him, his wet diaper will not feel cold.

It is when wet clothing is exposed to the air that evaporation makes it cold.

Disposable diapers are handy for traveling. Some mothers find them convenient for every day. The full-sized ones are rather bulky. The small ones that fit into a waterproof cover do not absorb as much urine as a cloth diaper and do not retain a bowel movement as well. Unless the waterproof cover can be boiled, it may tend to cause diaper rash.

93. **Washing the diapers.** You will want a covered pail to put used diapers in. It's better still to have two pails, one containing plain water for the wet diapers, the other soapy water for the soiled ones. When you remove a soiled diaper, rinse it by holding it in the toilet while you flush it (hold tight). If you have no toilet with running water, scrape the bowel movement off the diaper with something like an old table knife before putting it in the pail.

Now for the washing. One good method is to first boil the diapers for five minutes in soapy water. The soap should be well dissolved before putting the diapers in, so that lumps won't be sticking to them later. This boiling sterilizes the diapers and removes most of the stains, all in one step. Then wash out the remaining stains in wash tub or washing machine. Rinse several times in clean water. The number of rinsings depends on how soon the water gets clear and on how delicate the baby's skin is. Three rinsings are usually necessary to get out all the soap. But if your baby's skin isn't sensitive, two rinsings may be enough.

If it is inconvenient to boil the diapers, you can wash them first in soapy water in wash tub or washing machine. This, along with the rinsing, may be sufficient if there is no diaper rash. But, there are bacteria which sometimes collect in diapers, which manufacture ammonia from the urine. This ammonia is the main cause of diaper rash. These bacteria are not completely removed by washing. They must be destroyed, if there is diaper rash, by boiling the diapers or by adding the right kind of antiseptic to the last rinsing water. Ask your doctor for the name of a diaper antiseptic that is safe and convenient.

Sunshine is a potent destroyer of many bacteria. There will

probably be less chance of diaper rash if you can hang the diapers (and also the other things that are wet by the urine: nighties, shirts, sheets, pads, waterproof sheeting, waterproof pants) in the sun to dry.

94. Waterproof pants. Waterproof pants over the diapers are a special help when you are going places with the baby. Whether you use them at home depends on how well the baby's skin stands up. When a baby has no waterproof pants on, a lot of the urine in the diaper is absorbed into the surrounding clothing or evaporated. With waterproof pants the diapers stay much wetter and warmer, and bacteria accumulate in them. This favors the formation of ammonia and diaper rash. As long as your baby's skin is clear in the diaper region, you can use pants as much as is convenient. When there is diaper rash, leave them off. It probably helps to wash the pants with soap and water each day and hang them in the sun to kill the germs that make ammonia. If you can, get pants made of material that can be boiled daily; they will probably cause less diaper rash.

How the Baby Is Doing

GETTING ENOUGH TO EAT

95. An infant usually knows how much food he needs. If he is outgrowing his present formula, or if his mother's breast-milk supply is not increasing fast enough, he will probably begin to wake earlier and earlier before each feeding and cry with a cry that you now recognize as one of hunger. He will be finishing all his bottles to the last drop and looking around for more. He may try to eat his hands. If you are weighing him, you may find that he is gaining less than he did before. Sometimes a baby who is getting hungry will become constipated, too. If he is getting *really* hungry, he may cry at the end of some of his feedings, too.

If your baby is showing some of these signs of dissatisfaction and if he is on a formula, it is time to get in touch with your doctor to see about an increase. If you are unable to consult a doctor and are using the formulas in this book, it is time to change to the next larger or stronger formula. In fact, you don't have to wait this long. It's reasonable to increase the formula just as soon as a baby is regularly finishing all his bottles, even before he's showing any signs of dissatisfaction. There's one caution: if you give him an increase on such slight provocation, he probably won't be ready to take it all. So be extra careful not to urge him.

If a baby is being breast fed and waking early, you can nurse him early, even though this might mean an extra feeding a day. The more frequent feedings will help to satisfy him, and the more frequent emptying of the breasts will stimulate them to produce a larger supply if that is possible. If you were nursing at only one breast a feeding, give both breasts at each feeding for a while.

Now we need to discuss weight gaining, crying, and the bowel movements in greater detail.

96. How much weight should your baby gain? The best that you can say is that he should gain at the rate that he seems to want to gain at. Most babies know. If they are given more food than they need, they refuse it. If they are given less, they show their hunger by crying longer before feedings and eating their fists.

We can talk about average babies, if you remember clearly that no baby is average. When a doctor talks about an "average" baby, he only means that he has added together the fast gainers and the slow gainers and the medium gainers. One baby is *meant* to be a slow gainer and another is *meant* to be a fast gainer.

If a baby is gaining slowly, that doesn't mean for sure that he was meant to. If he is hungry all the time, that is a pretty good sign that he is meant to be gaining faster. Once in a while slow gaining means that a baby is sick. A slow gainer particularly needs to be seen regularly by a doctor to make sure that he is healthy. Occasionally you see an exceptionally polite baby who is gaining slowly and who doesn't seem too hungry. But

if you give him more to eat, he takes it quite willingly and gains more rapidly. In other words, not every baby yells when he is being fed too little. Sometimes slow gaining and poor appetite seem to be due to an iron or vitamin deficiency. The baby picks up as soon as the lacking substance is added to the diet. Such cases show again the importance of regular visits to a doctor, particularly if the baby is not flourishing.

The average baby's weight is a little over 7 pounds at birth, and 14 pounds at 5 months. That is to say, the average baby doubles his birth weight at about 5 months. But in actual practice, babies who are small at birth are more apt to grow faster, as if trying to catch up, and babies who are born big are less apt to double their birth weight by 5 months.

The average baby gains close to 2 pounds a month (7 or 8 ounces a week) during the first 3 months. Of course, some healthy ones gain less, and others more. Then he slows down. *By 6 months the average gain is down to a pound a month* (4 ounces a week). That's quite a drop in a 3-month period. In the last quarter of the first year, the average gain is down to ⅔ pound a month (2 or 3 ounces a week), and during the second year to about ½ pound a month.

As the baby grows older, you can see that he gains more slowly. He also gains more irregularly. Teething, for instance, may take his appetite away for several weeks, and he may hardly gain at all. When he feels more comfortable, his appetite revives and his weight catches up with a rush.

You can't decide too much from how a baby's weight changes from week to week. What he weighs each time will depend on how recently he has urinated, how recently he has moved his bowels, how recently he has eaten. If you find, one morning, that he has gained only 4 ounces in the past week, whereas before he had always gained 7, don't jump to the conclusion that he is starving or that something else is wrong. If he seems perfectly happy and satisfied, wait another week to see what happens. He may make an extra large gain to make up for the small one. Always remember, though, that the older he gets, the slower he will gain. If you weigh your baby daily, you should be even more casual about the results than if you weigh him weekly.

How often do you need to weigh the baby? Of course, most mothers don't have scales, and most babies get weighed only when they go to see their doctor. When a baby is happy and doing well, weighing doesn't serve any purpose except to satisfy curiosity. Under these circumstances once a week is plenty. If you weigh him every day, you encourage yourself to get too wrapped up in his weight. On the other hand, if your baby is crying a lot, or having indigestion, or if he is vomiting a great deal, frequent weighing may help you and your doctor in deciding what is the matter. For instance, if he is crying excessively but gaining rapidly, it points toward colic and not toward hunger.

COMMON KINDS OF INDIGESTION

Consult the doctor promptly about any change in your baby's digestion. Don't try to diagnose it yourself—there is too much chance of error. There are many other causes of vomiting, cramps, loose movements, besides those mentioned here. This discussion is primarily to help parents to adjust to a few common types of mild chronic indigestion of early infancy, after the doctor has made the diagnosis.

97. **Hiccups.** Most babies hiccup pretty regularly after meals in the early months. It doesn't seem to mean anything, and there is nothing that you need to do, aside from being sure he has no bubble. If a drink of warm water stops him, there's no harm in giving it.

98. **Spitting and vomiting are common.** Spitting and vomiting are really the same thing. The word spitting is popularly used when only small amounts of milk are brought up. Most babies do some spitting during the early months, and this usually means nothing. Some spit several times after every feeding. Others only do it occasionally.

It alarms a new mother when her baby first vomits a large amount of milk. But this is not serious in itself if the baby seems otherwise healthy. There are a few babies who vomit a large amount as often as once a day, especially in the early weeks. Naturally, if your baby spits or vomits regularly, even though he is continuing to gain, you should discuss it with the doctor—particularly if there are other signs of indigestion. The doctor

may be able to bring about improvement by changes in the feeding. In many cases, though, the spitting goes right on, no matter how you change the formula or decrease the quantity.

The question will occur to you, if your baby has vomited what seems like his whole feeding, whether you should feed him again right away. If he seems happy enough, don't feed him, at least until he acts very hungry. His stomach may be a little upset, and it is better to give it a chance to quiet down again. Remember that the amount vomited usually looks larger than it actually is. There are babies who you would swear are vomiting most of every feeding, who still go on gaining satisfactorily.

Whether the spit-up milk is sour and curdled or not is not important. The first step in digestion in the stomach is the secretion of acid. Any food that is in the stomach for a while will be acidified. The effect of acid on milk is to curdle it.

All that I have been saying about how common it is for babies to spit and to vomit occasionally doesn't mean that you never have to take vomiting seriously. A baby who begins vomiting all his feedings right after birth must be watched carefully by the doctor. Usually it's due to mucus in the stomach and clears up in a few days, but once in a great while it's more serious and requires operation.

There is another uncommon form of vomiting which may start early but is most apt to begin when the baby is several weeks old. There are two varieties, called pylorospasm and pyloric stenosis. In both, the valve leading from the far end of the stomach into the intestines will not open up satisfactorily to let the food through. It is more common in boy babies. The food is vomited out with great force ("projectilely"), so that it lands at a distance from the baby's mouth. The vomiting may occur during, or shortly after, the feeding. It doesn't mean that your baby has this condition if he has "projectile" vomiting once in a while. But if he has projectile vomiting as often as twice a day, he *must* be under careful medical observation. If other methods of treatment fail, and if he continues to vomit most of his feedings and fails to gain, he may have to be cured by operation.

If your baby has not been a vomiter and then suddenly vomits a large amount for the first time, it's a good idea to take his temperature to make sure that he is not sick. Many different infections start with vomiting in a baby. If he has no fever and looks entirely normal, don't worry. If he seems sick in any other way or vomits again, call the doctor.

In most babies the tendency to spitting is greatest in the early weeks and months, and improves as they get older. Most have stopped it altogether by the time they can sit up. An occasional one goes on until he is walking. Once in a while a baby will only start his spitting when he is several months old. Sometimes teething seems to make it worse for a while. Spitting is messy and inconvenient, but otherwise not important if he's gaining well and is happy.

99. "Three-month colic" and "irritable crying." In this section I am describing two somewhat different conditions which may be related to each other. The first is colic (sharp pains in the intestine). The baby pulls up his legs in pain, screams piercingly, and may pass gas by rectum. The second condition is excessive "irritable crying." The baby, even though he has had plenty to eat, cries miserably for hours at a stretch without definite signs of pain or gas. He may be pacified as long as you hold him and carry him about. One baby has colic, another has irritable crying, a third seems to have a mixture. The two conditions may be related to each other, because both commonly start around 2 to 4 weeks of age and are usually over by the time the baby is about 3 months old. Both conditions cause trouble most often between 6 and 10 P.M.

The commonest story is this: The baby was said to be well behaved and quiet in the hospital; but a few days after going home he suddenly has a crying spell that lasts for 3 or 4 hours straight. His mother changes him, turns him over, gives him a drink of water, but nothing works for long. After a couple of hours she wonders if he is hungry ahead of time, because he seems to be trying to get everything into his mouth. She warms up a bottle and he takes it eagerly at first, but before it's finished he lets go and cries again. The screaming often continues for the full 4-hour interval between feedings. After he has finished his next regular bottle he may be miraculously relieved.

Lots of babies have just a few attacks scattered through the early months. At the other extreme is the infant who has trouble every night until he's 3 months old (that's why the severer cases have always been called "three-month colic").

One baby will be very regular about his colic or irritable crying. He will sleep like an angel after every feeding but one, and always scream from 6 P.M. to 10 P.M. or from 2 P.M. to 6 P.M. Another baby spreads his unhappiness through a longer period and the mother says, "He sleeps like a lamb all night, but fusses off and on for half the day." This is not as bad as the baby who sleeps all day and fusses half the night. Another starts out being restless in the daytime and then gradually shifts to night or vice versa. The crying of colic most often begins after a feeding, sometimes right after, sometimes half an hour or so later. In this way it is different from the crying of the hungry baby, which usually occurs *before* the feeding.

A mother is distressed to have her baby so unhappy and thinks that something is terribly wrong. She wonders how long he can keep this up and not become exhausted. She wonders how long *she* can stand it. The strange thing is that the colicky or crying baby usually prospers from the physical point of view. In spite of hours of crying, he continues to gain weight, not just average-well but better than average. He is a hungry baby. He gulps down his whole feeding and always seems to be demanding an increased amount.

When a baby turns colicky, the mother's first thought is apt to be that his feeding is wrong. If he is on the breast, she thinks her milk is to blame. If he is on a formula, she wonders if it needs some fundamental change—perhaps from evaporated milk to fresh milk or perhaps from granulated sugar to a fancier sugar, like the baby next door. Changing the formula may bring about improvement in some cases, but not in most. It is plain to see that the quality of the feeding is not the main cause of colic. Otherwise, why should the baby be able to digest it perfectly four out of five feedings a day, and only get into trouble in the evening? Colic occurs with breast milk, with cow's milk, and with all kinds of formulas. Once in a great while, orange juice is suspected of being the cause.

We don't know the basic cause of most colic or irritable crying. One guess is that both conditions are due to a periodic tension in the baby's immature nervous system. The fact that the trouble is commonest in the evening or late afternoon suggests that fatigue plays a part. Many babies up to the age of 3 months are on edge just before falling asleep. Instead of being able to slip peacefully off, they must let out at least a few piercing cries. Sometimes there's a suspicion that nervousness in the household affects the baby. One mother, who hasn't much confidence in herself yet, will swear that the colic is worse on the nurse's day out, another woman says that the colic is much better when she herself is in a calm, relaxed mood.

The most important thing is for the mother and father to recognize that the condition is fairly common, that it doesn't seem to do the baby any permanent harm, that, on the contrary it occurs most often in babies that are developing and growing well, and that it will probably be gone by the time the baby is 3 months old, if not before, leaving him none the worse for wear. If the parent can accept the condition in a fairly calm and resigned way, the battle is half won. This may even contribute to the calming down of the baby's system. Read the end of Section 101.

Some colicky babies seem to be definitely better when they lead quiet, calm lives—sleeping in a quiet room, being handled slowly and gently, being talked to softly, not seeing any visitors (at least closely), not being tickled or roughhoused in any way, avoiding noisy places outdoors, and perhaps, in an extreme case in a city, not going outdoors at all till the colic improves. The colicky baby, like others, must have company and cuddling and be smiled at, but it must be done more gently. It is important to get his bubble up after feedings. The mother should keep closely in touch with the doctor.

But suppose it is not possible to get in touch immediately with the doctor. What home remedies are useful? The colicky baby is usually more comfortable on his stomach. He may get more relief still by being laid across the mother's knees, or a hot-water bottle, and rubbed on his back. The hot-water bottle should be covered by a layer of cloth, so that it won't burn on long contact. When the colic is agonizing, a warm enema may

give dramatic relief. (See "Enemas," Section 381.) This is not a remedy that should be given several times a day, but used only on especially severe occasions. If you cannot reach a doctor for many days, you can try the formula changes suggested in the next section. Should you pick a baby up, or rock him gently, or carry him around while he has the colic? Even if it makes him stop crying, will it spoil him? We aren't as scared, nowadays, of the danger of spoiling a baby as we used to be. If a baby is comforted when he is miserable, he usually doesn't go on demanding that comfort when he *isn't* miserable. If a baby is screaming with colic or irritability, and picking him up or rocking him seems to help him, then do it. If, however, holding him makes him feel no better than anything else, it's just as well not to get him used to being held so much. See also Section 101.

100. Mild indigestion and gas. In "three-month colic" and periodic "irritable crying," the baby has regular spells of misery which seem to have more to do with the time of day than with what he is having to eat. But another baby may develop a spell of indigestion that's more continuous. Common symptoms are discomfort and fretting, passing gas by rectum, spitting and vomiting, bowel movements that are partly loose, partly curdy, and perhaps greenish. These cases are more likely to be improved by changes in the formula than are cases of three-month colic. If you have a doctor or can reach one, you should, of course, consult him about a baby's indigestion, even if the baby is gaining. It is absolutely necessary to consult a doctor if a baby is having trouble and not gaining weight.

If you are completely out of reach of a doctor and indigestion is persisting or getting worse, you can try this combination: Acidify the formula (Section 49) and, if you are using granulated sugar, change to corn syrup (same number of tablespoonfuls). If these changes are successful, keep them up for a couple of months, or until you can consult a doctor. If there's not much improvement in a few days, weaken the formula to ¾ strength (Section 51), still keeping it acidified and using corn syrup. You should not continue with a weakened formula for long, unless the baby is satisfied with it and gaining well.

CRYING

101. What to do when your baby cries. This may be an important question in the early weeks, especially with your first baby. By the time he's a few months old, you will know his ways, and what different cries mean. The thing to remember is that crying in the baby a few weeks old is seldom a sign of anything serious.

Several questions pop into your mind. Is he hungry? Is he having indigestion? Is he wet? Is a pin sticking into him? Is he sick? Is he getting spoiled?

A baby's cry of hunger is usually different from his cry from some other discomfort. But at first you can't tell the difference. A baby doesn't usually get hungry all of a sudden, from one day to the next. He's more apt to work up to it gradually. If he is on a formula he will probably have been finishing every bottle for several days and looking around for more. He usually does his crying just *before* his feedings. As he gets hungrier, he wakes earlier. Usually it's only after he has been waking early for several days that he begins to cry for a period *after* his feedings. All this doesn't mean that a baby can't occasionally get hungry early, as an exception. There is no harm in feeding him half an hour or an hour early, if he seems to be really hungry. This will not spoil him. If he is regularly crying early, he needs more to eat. If he wakes and cries half an hour or an hour *after* taking a good meal, the chances are he is not hungry but is having indigestion.

It is easy to find out whether a baby is crying because he is wet. A few babies seem uncomfortable when wet. Others don't mind it at all.

You always think of an open safety pin, but it doesn't happen once in a hundred years. It's easy to look and see.

Is he crying because he's sick? Babies catch colds and they catch intestinal infections during their early months, but these show themselves by running noses, coughs, and loose bowel movements. Other infections are pretty rare. If your baby is not only crying, but looks different in general appearance and color, take his temperature and report to the doctor.

He may have a slight attack of indigestion. Try bubbling him again even though you got a bubble up before. Indigestion

with spitting and loose, curdy, green stools is discussed in Section 100. Colic (with cramps and gas), and "irritable crying" (both discussed in Section 90), are apt to come on in the evening or afternoon, when the baby is two or three weeks old. But don't, decide that your baby has chronic indigestion or colic because of one upset.

Comfort a miserable baby if you can. It certainly won't spoil him to hold or rock him occasionally during the early months. However, that doesn't mean that you ought to pick him up every time he whimpers. Plenty of babies fuss off and on and then go back to sleep, and some seem to have to cry always for a few minutes before falling asleep.

But does a baby ever cry because he is spoiled? I think not, in the first couple of months. And even after that, spoiling results only from a chronic situation (see Section 90).

Chronic Excessive Crying. It is true that an exceptionally high strung, wakeful, colicy baby, who has been held a great deal during his first months, may continue to cry unless held, even after his painful colic seems gone at about three months. Even so I imagine that this is due more to his tense nature than to spoiling. However I would try by three months to get such a baby used to not being held except near meal time, because the older and wiser he gets the harder the readjustment may be. It may help to hang toys in his crib, to use the carriage instead of his crib indoors so that he rocks himself a little or can be rocked, to put him outdoors a lot so that he can watch the trees. One fretful baby may learn to be satisfied if he can have people nearby to watch. But another settles down at rest time more easily in a room by himself, even if he has to cry for half an hour the first few times, or even if he always has to cry for ten or fifteen minutes when put down.

Even at three or four months a baby can probably accept a new routine more quickly and more comfortably when his mother acts sure of herself, is calm, friendly but firm.

Suppose you do have the bad luck to have a baby who cries a great deal, despite your own and your doctor's efforts. You will have to think of yourself, too. You may be the kind of mother who won't be bothered too much after you have found out that there is nothing seriously wrong with him and after

you have done all that you can to make him happy. That's fine, if you are made that way. But many mothers get worn out and frantic listening to a baby cry, especially when it's the first. You should make a great effort to get away from home and baby for a few hours at least twice a week—oftener if you can arrange it. Hire someone, or ask a friend or neighbor to come in and relieve you. If you're like most people, you will hesitate to do this. "Why should I inflict the baby on somebody else? Besides I'd be nervous being away from him for so long." But you shouldn't think of a vacation like this as just a treat for you. It's very important for you, for the baby, and for your husband, that you shouldn't get exhausted and depressed. If you can't get anyone to come in, let your husband stay home one or two evenings a week, while you go out to visit or see a movie, and encourage him to take one or two nights off a week. The baby doesn't need two worried parents at a time to listen to him. Try also to get friends to come in and visit you. Remember that everything that helps you keep a sense of balance, everything that keeps you from getting too preoccupied with the baby, helps the baby and rest of the family in the long run.

102. Breath-holding spells. Some babies get so furiously angry when they cry, and hold their breath so long, that they turn blue. When this first happens it scares the wits out of the parents. It seldom means anything except that the baby has that kind of a temperament. (It's often a baby who's unusually happy at other times.) The doctor should be told about it, so that at the next visit he can make sure that everything is all right physically; otherwise nothing needs to be done. It's not a reason for keeping the baby from ever crying. If you pick him up every time he lets out a peep, he's likely to get a little spoiled.

Occasionally, a baby begins to hold his breath in a rage when he is over a year old. This is just another form of a temper tantrum. See Section 273.

THE BOWEL MOVEMENTS

103. Meconium. For the first day or so after birth the baby's movements are composed of material called meconium, which is greenish black in color and of a smooth, sticky consistency. Then they change to brown and to yellow. If a baby hasn't had

a movement by the end of his second day, the doctor should be notified.

104. The breast-fed baby may have many or few movements. A breast-fed baby usually has several movements a day in the early weeks. Some have a movement after every nursing. They are usually of a light yellow color. They may be pasty or they may have the consistency of a thick cream soup. They are practically never too hard. Many breast-fed babies change from frequent to infrequent movements by the time they are 1, 2, or 3 months old. Some then have one movement a day, others a movement only every other day, or even every third day. This is apt to alarm a mother who has been brought up to believe that everyone must have a movement every day. But there is nothing to worry about as long as the baby is comfortable. The breast-fed baby's movement stays just as soft, even when it is passed every 2 or 3 days.

Some of these breast-fed babies who have infrequent movements begin to push and strain a lot when 2 or 3 days have gone by. Yet the movement is like creamed soup when it does come out. The only explanation I can make of this is that the movement is so liquid that it doesn't put the right kind of pressure on the anus, where the movement comes out. Consult the doctor about this. Adding a little solid food to the diet usually helps, even though the baby doesn't otherwise need solid food yet. Two to four teaspoonfuls of puréed prunes daily (stewed or canned) generally works well. There is no call for cathartics in this kind of difficulty. In some cases the doctor, after examination, may decide to dilate the anus. If your baby is having a particularly difficult time, and you cannot reach the doctor, you can relax the anus muscle a little by cutting a piece of soap in the shape of the tip of your little finger (pointed at one end), moistening it, slipping it into the anus, and holding it there until the baby begins to push the movement out. (The little finger itself, with nail cut short, greased with petroleum jelly or cold cream, will do as well as soap if you are careful not to scratch the anus with the nail.) I think it is better not to use soap or finger regularly, for fear the baby will come to depend on it. Try to solve the problem with prunes or other solid food.

105. The bottle-fed baby's movements. The baby fed cow's

milk usually has between one and four movements a day at first. As he grows older the number tends to decrease to one or two a day. The number is unimportant if the consistency of the movement is good and if the baby is doing well.

Cow's-milk movements are most often pasty and of a pale yellow color. However, some young babies always have stools that are more like soft scrambled eggs (curdy lumps with looser material in between). This is not important if the baby is comfortable and gaining well.

The commonest disturbance of the bowel movements in the baby on cow's milk is a tendency to hardness. This is discussed in the section on constipation (107).

A very few bottle-fed babies have a tendency to looseness in the early months. This is usually worse as more sugar is added to the formula. A severe case needs a lot of supervision by the doctor, because it may be difficult to give such a baby enough to eat without irritating the intestines. However, if a baby's movements are always just a little loose, it can be ignored, provided he is comfortable, gaining well, and the doctor finds nothing wrong. See Section 100.

106. Changes in the movements. You can see that it doesn't matter if one baby's movements are always a little different from another baby's, as long as he's doing well. It's more apt to mean something, and should be discussed with the doctor, when his movements really change from what they were before. If they were previously pasty and then turn lumpy, slightly looser, slightly more frequent, it may be a spell of indigestion or a mild intestinal infection. If they become definitely loose, frequent, and perhaps greenish, it is almost certainly due to an intestinal infection (diarrhoea), whether mild or severe. When a bowel movement is delayed and then comes unusually firm, it sometimes means the beginning of a cold, sore throat, or other disease, but not necessarily. (The infection makes the intestine more sluggish, just as it's apt to diminish the appetite.) Generally speaking, changes in the number and color of the movements are less important than changes in the consistency.

Mucus in the bowel movements is common when a baby has diarrhoea, and it is just another sign that the intestines are irritated. Similarly it may occur in indigestion. It can also come

from higher up, from the throat and bronchial tubes of a baby with a cold, or of a healthy newborn baby. Some babies form a great deal of mucus in the early weeks.

When a new vegetable is added to the diet (less frequently in the case of other foods), part of it may come through looking just the same as it went in. If it also causes signs of irritation such as looseness and mucus, give much less the next time. If there is no irritation, you can keep on with the same amounts or increase slowly, until he learns to digest it better. Beets can turn the whole movement red.

A bowel movement exposed to the air may turn brown or it may turn green. This is of no importance.

Small streaks of blood on the outside of a bowel movement come from cracks or "fissures" in the anus, usually caused by hard bowel movements. The bleeding is not serious in itself, but the doctor should be notified so that the constipation can be treated promptly. This is important for psychological as well as physical reasons (see Section 189). Larger amounts of blood in the movement are rare and may come from malformations of the intestines, from severe diarrhoea, or from intussusception. The doctor should be called or the child taken to a hospital immediately.

CONSTIPATION

107. What's constipation and what isn't? One baby always has his bowel movement at the same time of day, another at a different time each day. One is just as healthy as the other. There is no advantage to be gained by trying to make the irregular baby regular. In the first place, it can't usually be done. In the second place, there's a danger, in the long run, of upsetting the baby emotionally if you keep trying to get a movement out of him when he isn't ready.

It isn't constipation when a breast-fed baby has a movement only every other day, because the movement is still very soft. Perhaps you could call it a kind of constipation when he strains unsuccessfully to get this liquid movement out, but it's not the ordinary kind.

One type of constipation is when the movements of a baby on cow's milk become hard and formed. They may be uncomfortable for him to pass. Consult your doctor about this. If you

cannot reach a doctor, there are two remedies you can try. The simplest is to change the sugar in the formula to one which is more laxative. Brown sugar usually works. (You use the same amount that you were using of granulated sugar.) This kind of constipation will also be helped by adding prune juice or puréed prunes to the baby's diet. You can start with 2 teaspoonfuls of the prunes (stewed or canned), or of the juice (homemade, from stewed prunes, or canned prune juice), at the 6 P.M. feeding. If this isn't enough, increase to 4 teaspoonfuls of prunes or juice, or even more. Some babies get cramps from prunes or prune juice, but most take it all right.

Chronic constipation is less common in the older baby or child, especially if he is taking a varied diet including whole-grain cereals, vegetables, and fruits. If your child becomes constipated, take it up with the doctor—don't try to treat it yourself, because you aren't sure what it is due to. It's very important, whatever treatment you use, that you shouldn't get the child concerned about his bowel function. Don't get into serious conversations about it with him, or connect it with germs or his health or how he feels. Don't encourage him to keep track of his movements, or seem to pay too much attention to them yourself. Avoid enemas. Do what the doctor recommends as matter-of-factly, cheerfully, and briefly as possible, whether it's diet, medication, or exercise, without going into the whys and wherefores with the child; otherwise you may turn him into a hypochondriac.

But suppose you are unable to consult a doctor, and your child, otherwise healthy, gradually gets into a spell of constipation. (Naturally, if he has any symptoms of illness, you will be getting him to the doctor somehow.) Give him more fruit or vegetables, if he likes either, two or three times a day. If he likes prunes, serve them every day. For an older child, have raw prunes and figs handy for between-meal nibbling. Fruit and vegetable juices help, too. See that he has plenty of exercise. If he is 4 or 5 or older, and continues to have rather constipated and irregular movements that don't hurt him, in spite of your efforts with diet, relax until you can get a doctor's help. Don't keep after the child, don't get him worried about his movements, because that will do him more harm than the constipa-

tion. Don't get into the enema habit. But if you have a child of 1, 2, or 3 years, whose movements are hurting him, then it's more urgent to relieve him. Otherwise he may become worried all by himself, because of the pain. It's a psychological emergency. (If you cannot reach a doctor and are compelled to treat the condition yourself, a reasonably safe thing to use is a commercial preparation made of acidophilus bacilli, mineral oil, and chocolate flavoring, of which a teaspoonful a day in the evening is usually sufficient to prevent hard movements. This is not a cathartic and will not soften up an already hard movement. You give a teaspoonful every night after supper for at least a month, or until you can get advice from your doctor. If the movements are then good, cut down gradually, to ¾ teaspoonful for three nights, ½ teaspoonful and so on. If the constipation starts to return, give the full dose for another month.)

Temporary constipation is common during illness, especially if there is fever. In former days parents often felt it was the most important symptom to treat and that the child couldn't begin to recover until he was "cleaned out." Some people even believed that the constipation was the main cause of the illness. It's more sensible to realize that any disease that can make a person feel sick all over is apt to affect his entire stomach and intestinal system, slowing down his bowels, taking away his appetite, perhaps causing him to vomit. These symptoms may appear several hours before any others. The doctor may prescribe a cathartic on general principles, but if he is delayed in coming, the parent needn't feel that valuable time is being lost.

If you *have* to treat a sick child without a doctor, don't worry too much about his bowels. It's better to do too little than too much. If he isn't eating anything, there isn't much for his bowels to move. If you are sure that he only has a cold or a contagious disease and he hasn't moved for 2 or 3 days, you can give him an enema.

There is another kind of constipation in which the movement comes out as a collection of small hard balls. It will occur on a cow's-milk formula or on a regular solid-food diet. It is called **spastic constipation.** The sections of the large intestine go into spasms and hold small pieces of the bowel movement until they become dried into little balls. Nobody knows why the intestines

of some people have this tendency. It may be due to nervous tension in some cases. It is often hard to cure. Sometimes it is helped by changes in the formula or diet, but frequently not. In certain cases doctors use drugs which act on the nerves of the intestines. A child may outgrow spastic constipation at any age. If there will be a delay in consulting a doctor, you can try the preparation discussed in the paragraph on chronic constipation.

There are two other varieties of constipation, which are largely psychological in origin and start most frequently between the ages of 1 and 2. If a child at this age has one or two painfully hard movements, he may tend to hold back for weeks or even months afterwards, for fear of being hurt again. If he holds the movement in for a day or two, it's apt to be hard again, and this keeps the problem going. It's discussed in Section 189. Occasionally, when a mother goes at toilet training in too determined a manner, the small child, being in an independent stage in his development, becomes automatically resistant and holds the movement back, which leads to constipation. This form never needs to occur. It is discussed in Section 189.

Mineral oil in different preparations has been used for adults a great deal. It is not considered safe for babies for two reasons. If a baby chokes on it, some may get breathed into the lung, and possibly cause a chronic kind of pneumonia. Mineral oil is also believed to interfere with the absorbing of vitamins from the intestines into the body. This is more apt to happen if the oil is given two or more times a day. There are times when a doctor gives a mineral-oil preparation, in spite of these dangers. But a mother shouldn't take this responsibility by herself. (The preparation mentioned in "Chronic Constipation" is solid, and provides only a small dose of mineral oil once a day.)

DIARRHOEA

108. Diarrhoea in babies. A baby's intestines are sensitive the first year or two. They may be upset by too much sugar in the formula, by one or another vegetable, by cold germs, and by other germs which don't affect older children and grownups at all. This is why we try to protect babies from our colds, sterilize their milk so carefully, make formula changes gradually, add new foods slowly.

When a baby's movements, which have been good, suddenly turn loose, you should assume that he has an intestinal infection. There are usually other changes, too. The stools are apt to be more numerous. The color often changes, most commonly to greenish. The odor may be different. But the most important sign is the consistency of the movements.

Most diarrhoeas are mild, and can be cured easily if they are treated early. A diarrhoea should be considered *severe* if *any* of the following symptoms are present: watery stools; pus or blood in the stools; vomiting; fever of 101 degrees or more; when the baby looks prostrated or has sunken eyes with gray circles under them.

Even for a mild diarrhoea you ought to get in touch with the doctor very promptly, because the sooner treatment is started the lighter the disease will be and the quicker over. If the baby has any of the symptoms that point to a severe diarrhoea it is vitally important to get the doctor or to take the baby to a hospital, even if this involves a long trip.

109. **Emergency treatment of diarrhoea, until you can consult a doctor.** It will often be several hours before you can get advice from the doctor, and in the rare case of a baby who is hundreds of miles from nowhere, it may not be possible to reach one at all. So the following emergency suggestions are given. But they should not encourage any mother to treat a diarrhoea herself if she can possibly consult a doctor.

If the baby is on the breast alone, let him continue to nurse. If he wants less than usual, so much the better. If he is taking solids, too, omit them until you can talk to the doctor, or the diarrhoea is cured. Most diarrhoeas do well with breast milk.

If your baby is on formula alone and develops a mild diarrhoea, dilute each bottle in half until you can speak to the doctor (Section 51). Let the baby take as little of each bottle as will satisfy him. But if on this weak formula he gets hungry more often, feed him a little more frequently, perhaps every 3 hours if he's crying for it. If you *have* to continue to treat him yourself, try to keep him on half strength formula until his movements have been normal or nearly normal for a whole day, and until he is hungry for more. (It will make a fresh-milk formula more constipating to boil it for 20 minutes. You will need

to add a lot of extra water to make up for what boils away.) Then increase to a ¾ strength formula for a couple of days, and, finally, when he is hungry, to full strength. If he isn't hungry enough to demand a stronger formula, it's probably a sign that he's still ill and that it's safer not to increase yet. If a mild diarrhoea isn't much improved in 2 or 3 days, you should consider it more serious and make a greater effort to reach the doctor.

If a baby on both formula and solid foods develops a mild diarrhoea, omit all solids until you consult the doctor, or until the diarrhoea is over. If he is not hungry for his formula or if he is not improved in a day, dilute the formula as directed in the last paragraph. When he is well, get the formula back to normal first before adding the solids. In putting the solids back, go slowly—add only one more type of food each day; give one third of the usual amount the first day, two thirds the second day, the full amount the third day. Resume his usual foods in something like the following order: (1) gelatin or junket, (2) white cereal, (3) applesauce and orange juice, (4) potato or other starch, (5) meat and egg, (6) other fruits and cod-liver oil, (7) vegetables. For example: the first day you might give a third of his usual serving of junket; the second day two thirds his usual amount of junket and a third of his usual serving of cereal. Naturally you don't add any foods at this time that he was not taking before.

If a baby develops any of the symptoms pointing to a severe diarrhoea, give only water that day, 1 to 4 ounces every 2 or 3 hours if he is awake and wants it, until you can talk to the doctor. If you are compelled to go on treating the illness yourself, keep him on water alone for 18 to 24 hours. Then proceed *very* gradually. I will list the possible stages in increasing the diet. If he recovers very rapidly, you can begin jumping two stages a day. If he recovers fairly rapidly, advance one stage each day. If he's improving very slowly, take 2 days for each step. *Stage 1:* Make a formula using only ¼ of his usual amount of milk, no sugar, and enough water to make the usual total volume. (Boil the milk for 20 minutes.) Put only about ⅔ of the usual amount into each bottle, but use the rest to make a couple of extra bottles in case he has to be fed every 3 hours. Let him take just as little at each feeding as will satisfy him, better too

little than too much. *Stage 2:* Use ½ the usual amount of milk, enough water to make up the usual total, no sugar. *Stage 3:* Use ¾ the usual amount of milk, enough water to make up the usual total, no sugar. *Stage 4:* Full amount of milk (only enough extra water to make up for long boiling), no sugar. *Stage 5:* Add ⅓ the usual amount of sugar. *Stage 6:* Use ⅔ the usual amount of sugar. *Stage 7:* The usual amount of sugar. *Stage 8:* Stop the extra boiling. *Stage 9, and after:* Add solids gradually, as in the last paragraph. If the movements become looser, drop back two stages.

When a diarrhoea is improving, the first movement of the day is apt to look better, and a later one not as good. This in itself should not make you discouraged, but it shows that it is safer to see what the afternoon movements are like before strengthening the formula or adding to the diet. A sympathetic parent who is told to cut a baby's formula or diet way down during diarrhoea is apt to cry out, "But he'll be hungry." Maybe he will be, maybe not. But it's kinder to make him a little unhappy for a day or two than to let his diarrhoea get worse, for in the latter case you would have to starve him for longer in the end.

By the time a child is 2 or more, there is much less chance of diarrhoea's being severe or prolonged. Until the doctor can be reached, the best treatment is bed rest and such fluids and soft solids as water, skimmed milk, gelatin, junket.

RASHES

Consult the doctor about all rashes. It's easy to be mistaken.

110. **Diaper rashes.** Most babies have sensitive skins in the early months. The diaper region is particularly apt to suffer. You may bring your baby home from the hospital with a sore behind. This doesn't mean that the hospital has been neglectful, but only that his skin will need extra care. The commonest forms of diaper rash are collections of small, red pimples and patches of rough, red skin. Some of the pimples may become mildly infected and develop white heads (pustules) on them. If the rash is bad, raw spots may appear.

Diaper rash is mostly caused by ammonia. This is often mistakenly blamed on something in the baby's diet. But the ammonia is not passed in the urine. It is formed in the diaper and

wet bedclothes, by bacteria working on the urine. You boil diapers, or dry them in the sun, or use a special antiseptic in them to discourage the bacteria that make ammonia.

The first and the most important step in the treatment of diaper rash is either to boil the diapers or use the diaper antiseptic your doctor recommends in rinsing them. *When a rash is bad it is also important to boil or use antiseptic in washing the nighties, shirts, sheets, pads, waterproof sheeting—everything that gets wet with urine.* (Most waterproof sheeting can't be boiled but it can be scrubbed with soap, soaked in diaper disinfectant.) The second point is changing diapers frequently enough. Ordinarily, the diapers are changed when the baby is picked up for a feeding and again before he is put back to sleep, after his feeding. But if he has a severe diaper rash, you may need to change the diapers again midway between feedings, if this does not make him too wakeful. A third point is taking care that the diaper will not be too wet. Don't use waterproof pants when there is a rash; they hold all the moisture in. Use a pad between the baby and the waterproof sheeting in his bed. Sometimes it's worth while using two diapers at a time, if the baby drenches himself. The second one may be too bulky if it is put on the same way as the first. You can pin it around his waist like an apron. Have the opening in front, if he lies on his back, in back if he lies on his stomach. The fourth point is to use a heavy protective ointment in the area where he gets the rash every time you change the diaper. Zinc ointment or Lassar's paste will stay in place for a long while. Mineral oil, baby oil and petroleum jelly get wiped off or absorbed too fast to give long-lasting protection. A fifth point with a severe rash is to use boiling and also a diaper antiseptic, instead of one or the other. You do not have to use all the above for a mild diaper rash, or after a severe one has cleared up. I would, however, continue to boil the diapers daily for a baby subject to rash; or hang the diapers, nighties, shirts, sheets, pads, waterproof sheeting in the sun to dry after laundering, since sunshine is a good destroyer of bacteria.

When there are a lot of pustules in a diaper rash, it sometimes works better not to use an oil or ointment, but to expose the whole diaper area to the air for several hours a day, keeping the

baby in a warm room. You can cover his chest and his legs with two separate light blankets. Fold his diaper underneath him to catch some of the urine. Exposing a bad diaper rash, dry, to the air is the surest method of curing it, whether there are pustules or not.

Irritating bowel movements during an attack of diarrhoea sometimes cause a very sore rash around the anus. The treatment is to try to change the diaper just as soon as it is soiled, clean the area with oil, and apply a thick covering of zinc ointment.

111. Mild face rashes. There are several mild face rashes that babies have in the first few months which aren't definite enough to have names but are very common. First of all, there are minute shiny white pimples without any redness around them. They look like tiny pearls in the skin. They will surely go away as the baby gets older. Then there are collections of a few small red spots, or smooth pimples on the cheeks. These may last a long time and get a mother quite upset. At times they fade and then get red again. Different ointments don't seem to do much good, but these spots always go away eventually. Less common is a rough red patch on the cheeks that comes and goes. The more definite rashes are discussed in Section 414.

Babies in the early weeks often have white blisters in the middle part of their lips from sucking. These clear up in time and need no treatment.

112. Prickly heat. Prickly heat is very common in the shoulder and neck region of babies when hot weather first begins. It is made up of clusters of minute, pink pimples surrounded by blotches of pink skin. Tiny blisters form on some of the pimples, and when they dry up they give the rash a slightly tan look. Prickly heat usually starts around the neck. If it is bad, it can spread down on to the chest and back and up around the ears and face. It seldom bothers a baby. You can pat the rash with a bicarbonate of soda solution on absorbent cotton, several times a day (a teaspoonful of bicarbonate of soda to a cup of clean water). Another treatment is dusting with cornstarch powder. It is more important to try to keep the baby cool. Don't be afraid to take off his clothes in very hot weather.

113. Cradle cap. Cradle cap is a special form of eczema of the scalp. It is quite common in the early months. It appears as scaly patches which look dirty. The best treatment is to keep water and soap off the scalp altogether. Instead, clean the scalp with mineral oil or baby oil on a piece of absorbent cotton. Oiling the spots twice a day will soften the crusts and hasten their removal. If this method is not successful, consult your doctor.

MOUTH AND EYE TROUBLES

114. Thrush. Thrush is a mild fungus infection of the mouth. It looks as if patches of milk scum were stuck to the cheeks and tongue and roof of the mouth. But, unlike scum, it does not wipe off easily. If you do rub it off, the underlying skin bleeds slightly and looks inflamed. Thrush usually makes a baby's mouth sore. He shows the discomfort when he is trying to nurse. A baby's mouth is more apt to become infected with thrush if the nipples are handled carelessly. But it also occurs in babies who are taken care of to perfection. If you suspect it, consult the doctor promptly for diagnosis and treatment. If there is a delay in getting medical advice, it will be helpful to have the baby drink half an ounce of boiled water, or suck it from a piece of sterile absorbent cotton, after his milk. This will wash the milk out of his mouth and give the thrush fungus less to live on.

Don't be fooled by the color of the inner sides of the gums where the upper molar teeth are going to be. The skin color here is normally very pale and is sometimes mistaken for thrush by mothers who are on the lookout for it.

115. Cysts on the gums. Some babies have one or two little pearly-white cysts on the sharp edge of their gums. They may make you think of teeth, but they are too round and they don't make a click on a spoon. They have no importance and eventually disappear.

116. Discharge and tearing of the eye. Many babies develop a mild inflammation and discharge in the eyes a few days after birth. This is caused by the silver solution which is always dropped in the eyes, right after birth, to avoid infection. The doctor and the nurse will watch this to make sure that it is not an infection.

If at any later time the baby has an inflammation that makes the whites of his eyes look "bloodshot," or even pink, it is probably an infection, and the doctor should be called promptly.

There is another kind of very mild but chronic infection of the eyelids which develops off and on in the early months in quite a number of babies, most commonly in only one eye. The eye waters and tears excessively, particularly in windy weather. White matter collects in the corner of the eye and along the edges of the lids. This discharge may keep the lids stuck together when the baby first wakes up. The condition is caused by a plugged tear duct. The tear duct leads from the little red lump at the inner corner of the eye, in a diagonal direction down the nose, then through the bone, into the inside of the nose. This is the way the tear fluid, which is constantly flowing down over the eye, is led off into the nose. When this duct is partly plugged, the tears are not drained off as fast as they form. They well up in the eye and run down the cheek. The lids keep getting mildly infected, just because the eye is not being cleansed properly by the tears. The doctor should of course see the eyes and make the diagnosis.

The first thing to realize about this condition is that it is fairly common, not serious, and will not injure the eye. It may last for many months. The tendency will be outgrown in most cases, even if nothing is done. If by a year it is still bothersome, an eye doctor can clear the duct with a simple procedure. When the lids are stuck together you can soften the crust by laying over the lids a piece of sterile cotton wet with a sterile solution of boric acid. The doctor sometimes advises massage of the duct but don't do this without his directions. A plugged tear duct does not cause inflammation of the white of the eye. If the eye is bloodshot, something else is wrong and you should call the doctor.

117. **Crossed eyes.** It is common for a baby's eyes to turn in or out too much *at moments* in the early months. In most cases they become steady and straight as he grows older. If, however, the eyes turn in or out, *all the time* or *much of the time,* even in the earliest months, or if they are not steady by three months, an eye doctor should be consulted. Many times a mother will think her baby's eyes are crossed when they are really straight. This is because the skin area between the eyes

(over the root of the nose) is relatively wider in a baby than in an older person.

Mothers often ask whether it is safe to hang toys over a baby's crib, since he sometimes is cross-eyed looking at them. Don't hang a toy right on top of a baby's nose, but it's perfectly all right to hang it at arm's reach. You have to remember that when a baby is looking at something in his hands, he has to turn his eyes in more than an older person does, because his arms are so short. He is only "converging" his eyes normally, the way we all do to a lesser extent. His eyes won't get stuck that way.

If the eye doctor eventually decides that a child's crossed eyes will have to be operated on, sooner or later, it's better from the psychological point of view to have it done before other children make too much fun of him. That means operate around 4 or 5.

It's not uncommon in a newborn baby for the lid of one eye to droop a little lower than the other, or for one eye to look smaller. In most cases these differences become less and less noticeable as the baby grows older.

PROTRUDING NAVEL

118. Umbilical hernia. When the baby is in the womb, the blood vessels of the umbilical cord enter his abdomen through a hole in his abdominal wall. When the cord withers after birth, the skin of the navel heals over, and the hole in the deeper part of the abdominal wall begins to close up. As long as it has not closed completely, there will be a protruding of the navel, especially at the times when the baby is crying. Straining pushes a little of the intestine out through the deep hole and puffs the navel out. This is what a doctor calls an umbilical hernia. The popular word for a hernia is rupture. But a hernia or rupture at the navel doesn't mean that anything has broken or given way. It only means that the opening in the deep tissues has not closed up yet. It is nothing to worry about. It rarely causes trouble. There is no reason on this account to keep the baby from crying. The hole in the deep tissues of the abdomen closes at various times in different babies—in one within a few days of birth, in another after several months, and in still others it remains open throughout life. It's the large ones that are apt to remain.

It only means that the person will continue to have a slight bulging of the navel when he strains.

When the navel continues to puff out on crying a couple of weeks after birth, after the skin of the navel has completely healed, the doctor may recommend strapping it with adhesive tape. It is believed that the opening may close faster if the protruding is prevented. If your baby needs strapping, you should let your doctor show you how to put it on the first time. A 2-inch-wide piece of adhesive is usually used, long enough to encircle the front and sides of the abdomen. It should not cross the back, or it will be too tight when the baby's stomach is full. It has to be put on snugly to do any good. The piece of adhesive is kept on as long as it is holding firmly (usually 1 to 2 weeks). By the time it has loosened up enough so that there are wrinkles in the adhesive, it's doing no good and should be removed. The skin will be somewhat raw underneath. A new piece of adhesive is not put on until the skin is entirely healed. Don't put it on if there are any pimples where it will be, or if the skin of the navel is still unhealed.

In recent years elastic adhesive bandaging has been used for protruding navels. It stretches with the skin, stays in place considerably longer, and does not injure the skin as much. Elastic navel bandages can be purchased ready-made.

The baby can be given a tub bath as usual when he is wearing strapping over the navel. The bandage is continually renewed (as soon as the skin is clear) until the navel no longer protrudes on crying. Usually 1 to 3 months of treatment is sufficient. If, as he approaches the age of a year, the navel still protrudes, there is no point in going on with the bandage.

SWOLLEN BREASTS

119. When the baby has swollen breasts. Many babies, both boys and girls, have swollen breasts for some time after birth. In some cases a little milk runs out. This is caused by the glandular changes in the mother just before the baby is born. Nothing needs to be done for swollen breasts in the baby, the swelling will surely disappear in time. The breasts should *not* be massaged or squeezed since this is likely to irritate and infect them.

BREATHING WORRIES

120. Faint breathing. New parents usually worry a little about a new baby's breathing because it is often irregular, and so shallow that at times they can't hear it or see it. They may worry, too, the first time they hear their baby snoring faintly in his sleep. Both conditions are normal.

Chronic noisy breathing occurs in a certain number of young babies. In one form the baby makes a snoring noise in the back of his nose. It's just like a grownup's snoring, except that the baby does it while he is awake. It seems to be caused by the fact that he hasn't yet learned to control his soft palate. He'll outgrow it.

The commoner type of chronic noisy breathing is caused in the larynx (voice box). The epiglottis, which is a fleshy structure just above the vocal cords, is so soft and floppy in some babies that it is sucked down and made to vibrate. This causes a loud rattling, snoring noise during breathing-in, which doctors call stridor. It sounds as if the baby were choking, but he can breathe that way indefinitely. In most cases the stridor occurs only when the baby is breathing hard. It goes away when he is quiet or asleep.

Noisy breathing that comes on acutely, particularly in an older infant or child, has an entirely different significance from the chronic variety. It may be due to croup, asthma, or other infections, and requires *prompt* medical attention.

Every baby with noisy breathing, chronic or acute, should be examined by a doctor.

121. The thymus gland. You hear people talking about the thymus gland with great awe. You'd think it was a very dangerous gland indeed. It is often blamed on those very rare occasions when a baby dies for no apparent reason. Most of this bad reputation is not deserved at all. Every baby has a thymus gland in the upper part of his chest. Sometimes it is large enough so that it presses a little on the windpipe. This rarely causes any symptoms or trouble. When this kind of enlargement is discovered by an X-ray picture, it is usually recommended that the thymus be shrunken a little by X-ray treatments.

The old idea that "enlarged thymus" could cause sudden

death came about because of a misunderstanding about what size the gland is meant to be. Now that we know more about it, we realize that those glands which were found in cases of sudden death, and which were thought to be enlarged, were really normal-sized glands. In some of these rare cases of sudden death we still don't know the cause, but we are pretty sure it has nothing to do with the thymus.

So don't worry about the thymus. There's no good reason why a healthy newborn baby needs to be X-rayed to see how big his thymus is.

COMMON NERVOUS SYMPTOMS

122. **Babies who startle easily.** Newborn babies are startled by loud noises and by sudden changes in position. Some are much more sensitive than others. When you put a baby on a flat, hard surface and he jerks his arms and legs, it's apt to rock his body a little. This unexpected motion is enough to make a sensitive baby nearly jump out of his skin and cry with fright. He may hate his bath because he is held so loosely at that time. He needs to be washed in his mother's lap and then rinsed in the tub, while held securely in both her hands. He should be held firmly and moved slowly at all times. He will gradually get over this uneasiness as he grows older.

123. **The trembles.** Some babies have trembly moments in the early months. The chin may quiver, or the arms and legs may tremble, especially at the times when the baby is excited, or when he is cool just after being undressed. This trembling is nothing to be disturbed about. It is just one of the signs that the baby's nervous system is still young. The tendency will pass away in time.

124. **Head-rolling, head-banking, jouncing.** It's disturbing to a mother to have her baby take up the habit of banging his head. It seems so senseless and painful that it makes her doubt whether he's really bright after all. She wonders if the repeated blows will injure his brain. Even if she doesn't have these worries she finds it nerve-racking to sit in the next room and listen to the steady thud, thud, thud.

As one baby bangs his head against the bed, another rolls it from side to side. Another still gets up on his hands and knees

and rhythmically jounces down against his heels. This moves the crib across the room until it bangs against the wall.

What is the meaning of these rhythmic movements? I don't think we know for sure, but here are some suggestions. In the first place, these motions usually appear in the second half of the first year, in the age period when babies naturally begin to get a sense of rhythm and try to sway in time to music. But this is at best only a partial explanation. Jouncing and head-banging occur mostly when a baby is going to sleep or is partly awakened. We know that many babies when they are tired do not go directly and peacefully to sleep, but must go through a slightly tense period first. There are the 2- and 3-month-old infants who always scream for a few minutes before dropping off. Perhaps those older babies who suck their thumbs to go to sleep, and the others who bang their heads or jounce, are also trying to soothe away a tense feeling.

I think that the first baby in a family is more likely to bang his head or jounce than his younger brothers and sisters, and the solemn, high-strung one more often than the jolly, easygoing one. Some doctors have the impression that these rhythmic movements are commoner in babies who don't get quite enough cuddling. Maybe these notions have some connection with each other. It's natural for parents with their first baby to be more serious. They forget at times to relax, to be natural and comfortable, to show physical affection to the baby. As a result, he may be less cuddly, less sociable, less easygoing.

This idea may give a useful clue to some parents of jouncing, head-rolling, or head-banging babies, but I certainly don't want to give you the impression that it applies to all the babies who do these things, or that it's a proved theory even for a few. These habits do not mean that a baby is lacking in intelligence. They will not injure his brain.

When a baby bangs his head you can pad his crib to keep him from bruising himself. For the jouncing baby who rattles the whole house you can put the crib on a carpet and tack the carpet to the floor, or tie some kind of homemade pads, preferably of rubber, onto the feet of the crib. Or you can put the crib against the wall where it's going to end up anyway, and place a big wad of padding between the crib and the wall.

In any case, I would not scold the baby, or try to restrain him physically. Either of these measures would only make him more tense.

THUMB-SUCKING

125. Thumb-sucking in the early months is not a habit, it shows a need. Thumb-sucking is a subject about which there is yet no final agreement. I'll give you an idea of what is known and my suggestions of what to do about it. It used to be thought of as just a bad habit. That's why, when a baby first started, the mother would try to prevent it, before it became a "habit." But we now know that it isn't this kind of habit, at least in the beginning. The main reason that a young baby begins to suck his thumb is that he hasn't had enough sucking at the breast or bottle to satisfy his sucking instinct. Dr. David Levy pointed out that babies who are fed every 3 hours don't suck their thumbs as much as babies fed every 4 hours, and that babies who empty their bottles in 10 minutes (because the nipple holes are large) are much more likely to suck their thumbs than babies who have to work for 20 minutes. Dr. Levy fed a litter of puppies with a medicine dropper so that they had no chance to suck during their feedings. They acted just the same as babies who don't get enough chance to suck at feeding time. They sucked their own and each other's paws and skin so hard that the fur came off. Other factors have been suspected of helping to cause early thumb-sucking, such as a baby's having insufficient attention and cuddling, and having too little to occupy him when he is awake. They may be important in certain cases.

If your baby begins to try to suck his thumb or finger or hand, don't stop him directly, but try to give him more opportunity to suck at the breast or the bottle. There are two things to consider: the number of feedings, and how long each feeding takes.

126. The time to pay attention to thumb-sucking. The time to pay attention to thumb-sucking is when the baby first tries to do it, not when he finally succeeds. I make this point because there are lots of babies who, for the first few months of their lives, haven't much control over their arms. You will see such a baby struggling to get his hands up, and searching around with

his mouth. If by good luck he gets his fist to his mouth, he sucks it vigorously as long as it happens to stay there. This baby is showing a need to suck longer at the breast or bottle, just as much as the real thumb-sucker.

The very young baby needs help most, because if his craving to suck is thoroughly satisfied in the *early* months, there is little chance of his taking to thumb-sucking when he is older. The sucking instinct is strongest in the first 6 months. From then on it tapers off gradually. One baby seems to have had enough sucking as early as 8 months; another not till he is over a year.

All babies aren't born with the same amount of instinct to suck. You will see one baby who never nurses more than 15 minutes at a time and yet who never once has put his thumb in his mouth, and another whose bottles have always taken 20 minutes or more who thumb-sucks excessively. I suspect that a strong sucking instinct runs in some families.

You don't need to be concerned when a baby sucks his thumb for only a few minutes just before his feeding time. He is probably doing this only because he's hungry. It's when a baby tries to get his thumb just as soon as his feeding is over, or when he sucks a lot between feedings, that you have to think of ways to satisfy his sucking craving. Most babies who thumb-suck start before they are 3 months old.

I might add here that the thumb-, finger-, and hand-chewing which almost every baby does from the time he begins to teethe (commonly around 3 or 4 months) should not be confused with thumb-sucking. Naturally, the baby who is a thumb-sucker will be sucking at one minute, chewing at another, during his teething periods.

127. **Thumb-sucking in breast-fed babies.** I have the impression that a breast-fed baby is less apt to be a thumb-sucker. This is probably because the mother is inclined to let him go on nursing as long as he wants to. She doesn't know whether her breast is empty, so she leaves it up to the baby. When a baby finishes a bottle, it's done. He'll stop himself because he doesn't like to suck air, or his mother takes away the bottle. The first question, then, about a breast-fed baby who is trying to suck his thumb is, would he nurse longer if allowed to? If so, let him nurse as long as he wants—at least up to 40 minutes when he

feels like it—unless this definitely causes indigestion. A baby gets most of the milk from a breast in 5 or 6 minutes, the rest of the time he's satisfying his craving to suck, lured on by a small trickle of milk. In other words, if he nurses for 35 minutes, he gets only slightly more milk than if he had nursed for 20. A breast-fed baby, allowed to nurse as long as he wants, may vary surprisingly. He'll be satisfied with 10 minutes at one feeding and want as much as 40 minutes at another. This is an example of how breast feeding is adaptable to a baby's individual needs. If a baby being nursed on one breast each feeding doesn't want to nurse any longer, there's nothing that you can do about it except let him suck his thumb.

Sometimes the baby who is getting *both* breasts at each feeding and begins to suck his thumb presents a different problem. Suppose he is taken off the first breast after 10 minutes and put on the second. He may get so much milk that he's uncomfortably full after 5 minutes on the second. Then he stops nursing even though he has not satisfied his sucking instinct yet, and begins to suck his thumb. There are two methods you could try to make him nurse longer. See if he could be satisfied with one breast at each feeding, nursing as long as he will. If his hunger can't be satisfied that way, then at least let him nurse longer at the first breast. Instead of taking him off in 10 minutes, let him stay on for 20, if he will. Then put him to the second breast for as long as he wants.

128. **Thumb-sucking in the bottle baby.** With the bottle-fed baby, thumb-sucking is most likely to begin at about the time he learns to finish his bottle in 10 minutes instead of in 20. This happens because the baby gets stronger as he gets older, but the rubber nipples get weaker. Whatever length of time he is taking to finish the bottles, the first thing to do is to get new nipples, leave the holes as they are and see if that will lengthen the bottle time. Of course, if the nipple holes are *too* small some babies will stop trying altogether. Try to keep the nipple holes small enough so that a bottle will take 20 minutes anyway, at least during the first 6 months. In this discussion, I am talking about the actual number of minutes that the baby is sucking. Naturally, it wouldn't help to lengthen the feeding time by pausing in the middle of the feeding.

If you have a strong baby, he may be able to empty a bottle in 10 or 12 minutes, even with brand-new nipples with holes that haven't been enlarged. If this is so, buy "blind" nipples. These are made without any holes. You have to burn the holes yourself with a red-hot needle (see Section 67). Start with a fine needle, burn briefly, and try only one or two holes instead of the usual three, until you see how fast the nipple flows.

Bottles with plastic screw-on caps have nipples with a special opening near the edge for air intake. You can slow down this kind of bottle by screwing the cap on tighter. This partly blocks the air intake, keeps more of a vacuum in the bottle.

129. **With a thumb-sucker it's better to go slow in omitting feedings.** It's not just the length of each feeding, but also the number or frequency of feedings in the 24 hours which determine whether a baby satisfies his sucking instinct. So if a baby is still thumb-sucking, even though you have made each breast or bottle feeding last as long as possible, it is sensible to go slow in dropping other feedings. For example, if a 3-month-old baby seems willing to sleep through the 10 P.M. feeding, but is doing a good deal of thumb-sucking, I would suggest waiting a while longer before dropping it—perhaps for a couple of months. The same thing applies to the change from 4 feedings a day to 3 meals.

Suppose your 3-month-old baby is still thumb-sucking some, even though you have retained the evening feeding and have bought new nipples which make his bottles last for 20 to 25 minutes. Don't be discouraged. You have lessened his need to thumb-suck, even if you haven't eliminated it altogether. It is probable that he will give up thumb-sucking at an earlier age than he would have otherwise. But what should you do about the thumb-sucking that is still going on? Don't do anything to discourage it. When he is showing the need for more sucking, you want him to satisfy it, even with his thumb if necessary. You hope in this way to hasten the time when he will outgrow the need.

130. **Why not use restraints?** You may be worried about the effect of the thumb-sucking on the baby's jaws and teeth. Dentists aren't able to settle this point definitely in all cases. It is true that if a baby is thumb-sucking after his baby teeth come

in, it sometimes pushes the upper teeth out and the lower teeth in. (Whether this happens depends on the position of the thumb in the mouth.) But many dentists believe that a majority of the displaced teeth of this kind straighten out themselves without harm to the jaws or the *permanent* teeth, especially if the thumb-sucking stops before the permanent teeth come through around the age of 6. It is true, of course, that certain children have permanent teeth that are crooked, but a great majority are caused by other factors, such as heredity. Actually only about a quarter of the children with displaced teeth have ever been thumb-suckers.

But whether thumb-sucking displaces the teeth or not, you naturally prefer to have your child give it up as soon as possible. I think that trying to increase his sucking time on breast or bottle, and letting him suck his thumb in addition, is a surer and safer way than any method which tries to stop it by force.

Why not tie a baby's arms down or put aluminum mittens over his hands to keep him from thumb-sucking? It frustrates him, and that isn't good for him. There's no more logic to it than putting adhesive tape across his mouth to cure him of hunger. Furthermore, it usually doesn't cure the baby who is thumb-sucking a lot. We have all heard of despairing mothers who used elbow splints or metal mitts or bad-tasting paint, not just for days but for months at a time. And the day they took off the restraint, the thumb popped back in the mouth. There are lots of mothers who say they have had good results from using restraints. But in most of these cases the thumb-sucking was very mild. Many babies do a little thumb-sucking off and on. They get over it quickly, whether you do anything or not, because they have so little unsatisfied sucking instinct.

131. **Thumb-sucking in the older baby and child.** Up to now we have been talking about how thumb-sucking begins in the early months. But by the time a baby is getting near the age of a year, his thumb-sucking seems to be turning into something different. It is a sort of comfort which he needs at special times. He sucks when he is tired or bored or frustrated, or to put himself to sleep. When he can't make a go of things at the more grown-up level, he retreats to early infancy when sucking was his chief joy.

Even though thumb-sucking satisfies a different need after the age of a year, it's the baby who first sucked his thumb to satisfy his sucking need who goes on doing it when he is older to comfort himself. It's only rarely that a child beyond the age of one begins to thumb-suck for the first time.

There is no point worrying about lengthening the suckling time of the 1-, 2-, or 3-year old. His parents should only ask themselves whether there is anything they ought to do so that he won't *need* to comfort himself so much. If he is being exhausted by trying to keep up to older children, would it be better to keep him away from them for part of the day? Another child may be bored from not seeing enough of other children and from not having enough things to play with. Or perhaps he's having to sit in his carriage for hours. A child of one and a half may be at loggerheads with his mother all day because she is constantly stopping him from doing the things that fascinate him. Another child has children with whom he could play and freedom to do things at home, but he's too timid to throw himself into these activities. He thumb-sucks while he watches. I do not mean to suggest that every child who sucks his thumb is a problem. Even the happiest and best adjusted of children have their off moments, and many small children who are sucking their thumbs regularly don't seem to need any change in their handling. I only give the examples to make it clear that if *anything* needs to be done for thumb-sucking, it should be to make the child's life more satisfying.

Elbow splints, mitts, and bad-tasting stuff on the thumb only make the child miserable and don't stop the habit any more often in older children than they do in small babies. I think myself that they tend to prolong the habit. The same applies to scolding a child or pulling his thumb out of his mouth. I remember the story of Anne who finally stopped sucking her thumb of her own accord at 2. Six months later her Uncle George, who had been the member of the family who used to nag her about it, came back to the house to live. Anne's thumb-sucking began again the minute he entered the house. You often hear the recommendation that you give the child a toy when you see him thumb-sucking. It certainly is sound to have enough interesting things around for him to play with, so that he won't be bored.

But, if every time his thumb goes in his mouth you jump toward him and poke an old toy into his hands, he'll soon catch on. What about bribing? If your child is one of the rare ones who is still sucking his thumb at the age of 5, and you are beginning to worry about what it will do to his permanent teeth when they come in, you will have a fair chance of succeeding if the bribe is a good one. But practically no child of 2 or 3 has the will power to deny an instinct for the sake of reward. You're apt to make a fuss and get nowhere. Sometimes chewing gum helps an older child. Maybe you think one is just as bad as the other.

So, if your child is thumb-sucking, see to it that his life is good. Don't say anything. Most important of all, try to stop thinking about it. If you keep on worrying, even though you resolve to say nothing, the child will feel it and react against it. Remember that thumb-sucking, all by itself, will go away in time. In the overwhelming majority of cases it is over before the second teeth appear. It doesn't go away steadily, though. It decreases rapidly for a while, and then comes back partway during an illness or when the child has a difficult adjustment to make. Eventually it goes for good.

132. **Stroking movements with thumb-sucking.** Most of the babies who go on thumb-sucking until they are one or more years old do some kind of stroking at the same time. One rubs or plucks a piece of blanket, or diaper, or silk, or a woolly toy. Another strokes his ear lobe or twists a lock of hair. Still another wants to hold a piece of cloth right up close to his face and perhaps stroke his nose or lip with a free finger. These motions remind you of how the younger baby used to be gently feeling his mother's skin or clothing when he was suckling at the breast or bottle. And when he presses something against his face it looks as though he were remembering how he felt at the breast. These habits usually go away when the thumb-sucking goes.

133. **Ruminating.** Ruminating means that a baby or young child gets in the habit of sucking and chewing on his tongue until his last meal comes up (somewhat the way a cow's does). It's a rare condition. Some cases begin when a thumb-sucking baby has his arms restrained. He turns to sucking his tongue instead. I would certainly advise letting such a baby have his thumb back immediately, before the ruminating becomes a habit. Be

sure, also, that he has enough companionship, play, and affection. It is said that the meals stay down better when they consist entirely of solids. That means cooking the milk into his cereals, puddings.

Your Baby's Development

WATCHING HIM GROW

134. He's following the whole history of the human race. There's nothing in the world more fascinating than watching a child grow and develop. At first you think of it as just a matter of growing bigger. Then, as he begins to do things, you may think of it as "learning tricks." But it's really more complicated and full of meaning than that. Each child as he develops is retracing the whole past history of mankind, physically and spiritually, step by step. A baby starts off in the womb as a single tiny cell, just the way the first living thing appeared on the earth. Weeks later, as he lies in the amniotic fluid, he has gills like a fish. Toward the end of his first year of life when he learns to clamber to his feet, he's celebrating that period millions of years ago when man's ancestors got up off all fours. It's just at that time that the baby is learning to use his fingers with skill and delicacy. Our ancestors stood up because they had found more useful things to do with their hands than walking on them. The child in the years after 6 gives up part of his dependence on his parents. He makes it his business to find out how to fit into the world outside his family. He takes seriously the rules of the game. He is probably reliving that stage of human history when our wild ancestors found it was better not to roam the forest in independent family groups, but to form larger communities. Then they had to learn self-control, how to

co-operate with each other according to rules and laws, instead of depending on the old man of the family to boss them around.

To appreciate your child's development up to 5, you ought to read *Infant and Child in the Culture of Today* by Arnold Gesell and Frances L. Ilg.[1] They have studied hundreds of babies and children and can tell you not just what a child will probably do at different age periods, but something about what it means. When you understand what your child is up to, it's the first step in learning how to get along with him. As you watch your own baby grow, remember the advice in Section 16 of this book.

135. He's wrapped up in himself the first two or three months. In the period up to 2 or 3 months a baby hasn't much contact with the outside world. Most of the time he seems to be listening to what his insides tell him. When they tell him that all is well he is very peaceful. When they tell him about hunger, or indigestion, or tiredness, he feels wholeheartedly wretched because there's nothing to distract him. It's an irritable period for some babies. One has colic, another has spells of irritable crying, a third always screams for a few minutes just before falling asleep.

As a baby gets beyond the 3-month period, he takes a lot more notice of the world around him. He turns his head in all directions, all by himself, and seems pleased with what he sees.

136. He starts by using his head. It's a gradual process by which a baby learns to control his body. It starts with the head and gradually works down to the hands, trunk, and legs. Just as soon as he's born, he knows how to suck. And if something touches his cheek—the nipple or your finger, for example—he tries to reach it with his mouth. He's ready to do his part in nursing. If you try to hold his head still, he becomes angry right away and twists to get it free. Probably he has this instinct to keep from being smothered.

Mothers ask, "When does he begin to see?" This is a gradual process like everything else. As soon as he's born, he can tell light from dark. A bright light bothers him and makes him shut his eyes. In the early weeks he begins to fix his gaze on objects

[1] New York: Harper & Brothers, 1943, $4.00.

that are near. By the time he's 2 to 3 months old, he recognizes a human face and responds to it. By 3 months he looks around in all directions. In the early months he can't co-ordinate his two eyes very efficiently and often looks cross-eyed. Also, the surface of his eyes isn't sensitive, and a piece of fuzz there may not bother him at all.

A newborn baby seems to be deaf the first day or two. But soon he has a sharp sense of hearing and may startle all over when he hears a loud noise.

137. **He smiles early, because he's a social being.** Somewhere around 2 months of age your baby will smile at you one day when you are talking and smiling to him. It's an exciting moment for you. But think what it means about his development. He knows little at this age, he can't use his hands, or even turn his head from side to side. And yet he already knows that he's a sociable being, that it's nice to have loving people around, that he feels like responding to them. And if he's treated with plenty of affection and not too much interference, he'll go on being friendly and reasonable just because it is his nature.

138. **Using his hands.** A very few babies can put their thumbs in their mouth as soon as they are born, any time they want to. But most can't get even their *hands* to their mouths with any regularity until they are 2 or 3 months old. And because their fists are still clenched tight, it usually takes them longer still to get hold of a thumb separately.

But the main business of hands is to grab and handle things. A baby seems to know ahead of time what he's going to be learning next. Weeks before he can actually grab an object he looks as if he wanted to and were trying. At this stage, if you put a rattle into his hand, he'll hold onto it and wave it. Around the middle of the first year, he learns how to reach something that's brought within arms' reach. Gradually he handles things more expertly. In the last quarter of his first year, he loves to pick up tiny objects like specks of dust, carefully and deliberately.

139. **A child should use the hand he prefers, even if it's the left.** Whether a child turns out to be right- or left-handed is something that's born in him, but it takes some time for this "dominance," as it is called, to show up. In fact, it's common

during the first year for a baby to shift back and forth, preferring one hand for several weeks or months, then changing over. One baby will settle down to a lasting preference before the age of a year, another not till 2 or 3. One child is strongly one-handed, another only slightly so. Some experts believe that if a child never becomes sure which his dominant hand is, or if he gets confused because someone is trying to change him, there is a chance he will have trouble learning to speak, read, and write. So they feel that it is important to let every child find his own preference as definitely as possible, *whether it is left or right.* Now, many parents have heard that it is harmful to try to change a strongly left-handed child to right for fear of causing stuttering or a reading problem. But it's just as important not to change the *slightly* left-handed child—maybe more so. If he's not very sure to start with, it's easier to confuse him. I make this point because I've heard parents of a slightly left-handed child say, "I never *force* him to use his right. But he uses his right *almost* as easily as his left, so I just hand him everything to his right hand."

Don't try to influence your child's handedness. For instance, during the age period from 6 months to a year, when you hand him a piece of zwieback or a toy, get in the habit of stretching it out toward his middle, so that he has an equal choice. When he begins to use a spoon around a year, place it somewhere near the center of the dish, instead of on the right side. I don't mean that you should worry too much about which hand your baby prefers. I only mean that you should be a little careful not to influence him before you know what his real preference is.

"But," you may protest, "it's such a handicap to be left-handed. Everything in this world is arranged for right-handed people, from table setting to school desks." It is true that there are some disadvantages to being left-handed, but they are not nearly so serious as the problems of the child who has been changed and then has trouble learning to read. As a matter of fact, if a left-handed child is taught to hold his pencil and paper correctly, he can learn to write quite comfortably without having to crawl halfway around the paper.

Suppose you have already changed your older child from left hand to right, should you try to change him back? That's harder

to answer. Many children who have been changed show no ill effects from it, and so there's no point in putting them through another shift. On the other hand, if a mother is still in the process of trying to convince a left-handed child to use his right, at the age let's say of 2½, and he has just begun to stutter, I would advise her to reverse her methods quickly and encourage him to go back to his left. If a child has been thoroughly trained to use his right hand and is having speech or learning difficulties, the parents should consult a psychiatrist or psychologist about whether to make the shift back.

140. **How a baby feels about strangers.** You can get an idea of how a baby goes from phase to phase in his development by watching his reaction to strangers at different age periods. This is how it goes in a doctor's office. A 2-month-old baby doesn't pay much attention to his doctor. As he lies on the examining table he keeps looking over his shoulder at his mother. The 3-month-old is the doctor's delight. He will break into a body-wiggling smile just as often as the doctor is willing to smile and make noises at him. By about 5 months a baby is apt to have changed his mind. When a stranger approaches, he stops his kicking and cooing. His body freezes and he eyes him intently, suspiciously, maybe for 10 or 20 seconds. Then his stomach begins to rise and fall rapidly. Finally his chin puckers and he begins to shriek. He may get so worked up that he cries long after the examination is over. This is a sensitive period, when a baby may take alarm at anything unfamiliar such as a visitor's hat, or even his father's face. Probably the main cause of this behavior is that he is now smart enough to distinguish between friend and stranger. If your baby is sensitive about new people, new places, in the middle of his first year, I'd protect him from too much fright by making strangers keep a little distance until he gets used to them, especially in new places. He'll remember his father in a while.

Most but not all babies treat strangers, including doctors, in a fairly friendly way from about 8 to 11 months. They are now more interested in objects and in things to do than in new faces. But everything changes at about a year. I think 13 months is the most suspicious age of all. The usual baby at this age will scramble to his feet when the doctor approaches and try to climb off

the table and onto his mother. He cries furiously, buries his face in his mother's neck, ostrich fashion. Every once in a while he will stop just long enough to peer over his shoulder at the doctor with looks like daggers. He will probably stop crying and struggling soon after the examination is over. A few minutes later he may be happily exploring the office and even making friends with the villain himself. There is more about handling the sensitiveness of the one-year-old in Section 202.

141. **Rolling over and sitting up.** The ages when babies roll over, sit up, creep, stand up, walk, are more variable than the ages when they get control of their heads and arms. A lot depends on temperament and weight. A wiry, energetic baby is in a great rush to get moving. A plump, placid one is willing to wait until later.

A baby, by the age he first tries to roll over, shouldn't be left unguarded on a table for as long as it takes the mother to turn her back, unless he is secured with a strap (such as comes with fabric bathtubs). By the time he can actually roll over, it is not safe to leave him even in the middle of an adult's bed. It is amazing how fast such a baby can reach the edge.

Most babies learn to sit steadily (after being helped up) between 7 and 9 months. Some normal, intelligent ones wait till as late as a year. But before a baby has the co-ordination to succeed, he wants to try. When you take hold of his hands he attempts to pull himself up. This eagerness always raises the question in the mother's mind, "How young can I prop him up in the carriage or high chair?" Doctors feel that in general it's better not to prop a baby up until he can sit steadily himself. If he sits slumped over for long periods, it may stretch the ligaments and muscles that are meant later to hold his back straight. This doesn't mean that you can't pull him up to a sitting position for fun, or sit him in your lap, or prop him on a slanted pillow in the carriage, just as long as his neck and back are straight. It's the curled-over position that's not so good.

This brings up the question of high chairs. The main advantage is when the baby is eating his meals with the rest of the family. On the other hand, falling out of a high chair is a common accident. If a baby is going to be eating most of his meals by himself, I think it is preferable to buy him a low chair-table

arrangement. If you are going to use a high chair, get one with a broad base (so that it doesn't tip over easily) and a strap to buckle the baby in, and don't leave him in it when you go out of the room. Don't leave a baby for long periods in a high or low chair after he has learned to creep or stand. He needs more freedom.

142. **A toy or food while being changed.** One of the things a baby never learns is that he ought to lie still while his mother changes or dresses him. It goes completely against his nature. From around half a year, when he learns to roll over, until his mother dresses him standing up at about a year, he struggles or cries indignantly against lying down, as if he had never heard of such an outrage before.

There are a few things that help a little. One baby can be distracted by a mother who makes funny noises, another by a small bit of zwieback or cracker. You can have a special fascinating toy like a music box that you hand him at dressing time only. Distract him just before you lay him down, not after he starts yelling.

143. **When to get a play pen.** You don't have to have a play pen, but it's a help to mother and baby when he is smart enough to move himself around. Set up in the living room or the kitchen where the mother is working, it gives him the company that he can't have in his own room, and a chance to see everything that is going on. Later he has fun by the hour putting toys out onto the floor and getting them back again. When he is old enough to stand up, the pen gives him slats and railings to hold onto and a firm foundation under his feet. In good weather he can sit safely in his play pen on the porch and watch the world go by.

If you are going to buy a play pen, do it before the baby is used to the freedom of the open floor, otherwise he may object to being put behind bars.

144. **Creeping.** Creeping can begin any time between 6 months and a year. Some babies never creep at all, they just sit around until they learn to stand up. There are a dozen different ways of creeping, and a baby may change his style as he becomes more expert. One first learns to creep backwards, another somewhat sideways. One wants to do it on hands and toes with legs straight, another on hands and knees, another still on

one knee and one foot. The baby who learns to be a speedy creeper may be late in walking, and the one who is a clumsy creeper, or who never learns to creep at all, has a good reason for learning to walk early.

145. Standing. Standing usually comes in the last quarter of the first year, but a very ambitious, wiry baby may do it as early as 7 months. Occasionally you see one who doesn't stand until after a year who seems to be bright and healthy in all other respects. Some of these are plump, easygoing babies. Others just seem to be slow getting strength in their legs. I wouldn't worry about such a child as long as the doctor found that he was healthy and receiving plenty of vitamin D, and as long as he seemed bright and responsive in other ways.

Quite a number of babies get themselves into a jam when they first learn to stand up, but don't yet know how to sit down again. The poor things stand for hours until they are frantic with exhaustion. A mother will take pity on such a child, unhitch him from the railing of his play pen, and sit him down. But instantly he forgets all about his fatigue and pulls himself to his feet again. This time he is crying within a few minutes. The best that a mother can do is to give him especially interesting things to play with while he's sitting, wheel him in the carriage longer than usual, and comfort herself that he'll probably learn how to sit down within a week. One day he tries it. Very carefully he lets his behind down as far as his arms will reach and, after a long hesitation, lets go. He finds that it wasn't such a long drop and that his seat is well padded.

As the weeks go by, he learns to move around hanging on, first with two hands, then with one. Eventually he has enough balance to let go altogether for a few seconds when he is absorbed and doesn't realize what a daring thing he's doing. He is getting ready for walking.

Parents sometimes ask whether "walkers" are advisable. These are various contraptions in which a baby who hasn't yet learned to walk can sit and push himself around the floor. The purpose is to give him something interesting to do, keep him happy and out of trouble. One criticism of a walker is that, in the occasional case of a child who has a tendency to toe in or toe out too much, the walker encourages the condition. Take this

question up with the baby's doctor. In any case, I would keep a child in a walker only a small part of his waking hours and allow him plenty of chance to creep and explore.



146. **Walking.** Lots of factors enter into the age when a baby walks alone: ambitiousness, heaviness, how well he can get places by creeping, illnesses, bad experiences. A baby just beginning to walk when an illness lays him up for 2 weeks may not try again for a month or more. Or one who is just learning and has a fall may refuse to let go with his hands again for many weeks.

Most babies learn to walk between 12 and 15 months. A few muscular, ambitious ones start as early as 9 months. A fair number of bright children, without rickets or any other physical disease, do not begin until 18 months or even later.

When a baby begins to walk, it raises a lot of minor problems like shoes and "discipline," but these are taken up in later sections.

You don't have to do anything to teach your child to walk. When his muscles, his nerves, and his spirit are ready, you won't be able to stop him. I remember a mother who got herself into a jam by walking her baby around a great deal before he was able to do it by himself. He was so delighted with this suspended walking that he demanded it all day long. Her back was almost broken.

A mother of a baby who walks early may wonder whether it won't be bad for his legs. As far as we know, a child's physique is able to stand whatever he's ready to do by himself. Babies sometimes become bowlegged or knock-kneed in the early months of walking, but this happens with late walkers as well as with early walkers.

147. **Feet, legs, and shoes.** If your baby's feet and legs are developing well, he doesn't *have* to have real shoes until he's walking by himself. Then he'll need them for walking outdoors. Before that he needs shoes only to keep his feet from getting very cold, or to correct weak ankles. Knitted woolen booties are sufficient to keep the feet warm in a cold house at the standing stage, if they will stay on. If they won't, buy him cheap, soft, leather shoes with soft soles.

How straight the legs, ankles, and feet grow depends on several factors, including the pattern of development a baby is born with, and whether he has rickets (soft bones due to insufficient vitamin D). Some babies seem to have a slight tendency to knock-knees, and ankles that sag inwards, even though there is never any rickets. The heavy child is more apt to develop these conditions. Other babies seem to be born with a tendency to bowlegs and toeing in, quite apart from rickets. I think this is especially true of the very active, athletic ones. Now, if a baby has a tendency to knock-knees, and also has soft bones due to rickets, you can see why his knock-knees will develop more rapidly and more severely. The same applies to bowlegs. Another factor is the position a baby keeps his feet and legs in. For instance, you occasionally see a foot that becomes turned in at the ankle because the baby always sits with his foot tucked under him in that position. It is sometimes suspected that a baby has been made to toe in by always lying on his stomach with his feet

pointed toward each other, or by pushing himself in a "walker" with the outside edges of his feet.

All babies toe out to some degree when they start to walk, and then gradually bring the front part of the feet in, as they progress. One starts with his feet sticking right out to the side like Charlie Chaplin, and ends up toeing out only moderately. The average baby starts toeing out moderately, and ends up with feet that are almost parallel. The baby who starts out with feet almost parallel is more apt to end up toeing in. Toeing-in and bowlegs often go together.

The doctor at the regular examinations will watch the baby's ankles and legs from the time he begins to stand up. This is one of the reasons why regular visits are important during the second year. If weak ankles, knock-knees, bowlegs, or toeing-in develop, he may recommend corrective shoes. If there is any suspicion of rickets, he will prescribe extra vitamin D, too, or have an X-ray picture taken.

148. Shoes for the baby who's walking. When a baby is walking alone, he needs shoes with soles, for walking outdoors. Doctors most commonly recommend semisoft soles at first, so that the baby's feet will have plenty of chance to move. The important thing is to have the shoes big enough so that the toes aren't cramped, but not so big that they almost slip off.

Babies outgrow their shoes at a discouragingly fast rate, sometimes in 2 months, and a mother should form the habit of feeling the shoes every few weeks to make sure they are still large enough. There must be more than *just* enough space for the toes, because, as the child walks, his toes are squeezed up into the front of the shoe with each step. There should be enough empty space in the toe of the shoe, as the child stands, so that you can get about half your thumbnail onto the tip of the shoe before running into the child's toe. You can't judge while he is sitting down, the feet don't fill as much of the shoe unless he's standing up. Naturally the shoes should be comfortably wide, too.

If the doctor is prescribing wedges in the shoes to correct such things as weak ankles, toeing-in, bowlegs, knock-knees, he may specify firm shoes with a stiff sole. Corrective shoes don't do as much good if they are limp. They usually need to be high.

But if your baby's feet and legs are strong, you can get medium-soft shoes, even inexpensive ones if they fit well and are large enough. Low shoes won't usually stay on until he is about 2 years old, so buy high shoes at first.

149. Talking. Most babies begin to use a few sounds that mean something in the neighborhood of a year old. But there are perfectly normal children who wait many months longer. It seems to be largely a matter of temperament or personality. Your friendly, outgoing baby just naturally wants to talk young. The quiet, observer type seems to want to spend a long time solemnly watching the world go by before he feels like saying anything about it.

The atmosphere around a baby and the way he is handled are important, too. If a mother, under nervous tension, is always silent when she does things for her child, he will feel the lack of warmth in time, and draw into his own shell. At the other extreme, if the adults in a family are going at a baby too hard, talking at him, bossing him continually, he may feel uncomfortable and unresponsive whenever people are around. He's not at an age when he can talk back or go out for a walk to get away from it all. People young and old feel like talking when they are around with easygoing sympathetic friends. The only difference with a baby is that he has to have enough desire in order to learn the words in the first place.

It's sometimes said that a certain child hasn't learned to talk, because the whole family waits on him hand and foot, gives him everything before he's had time to realize that he wants it. This kind of service might slow a baby down a little in learning new words, but I don't think it would make him silent unless the family were also keeping after him too much and squelching his outgoingness.

Once in a while you suspect that a baby is slow to pick up words because his mother talks to him in long sentences, and he never has a chance to grab hold of a single word at a time to learn. This isn't common, because it comes instinctively to most people to use single words at first with a baby, or to stress the important word in a phrase.

Does slow talking point to slow mental development? It's apt to be the first awful thought that occurs to parents. It is true

that some children who are mentally slow are late talkers, but plenty of them use words at the regular age. Naturally, the child who is *severely* retarded, who can't sit up, for instance, until he's 2, will be really delayed in his talking also. But the fact is that a great majority of late talkers, even those who don't talk until 3, have normal intelligences, and some of them are unusually bright.

I think you can guess what to do if your child is a late talker. Don't fret about it and don't jump to the conclusion that he's stupid. Give him plenty of warm, comfortable affection, and be sure that you are not bossing him too much. Give him chances, if possible, to be around with other children where he can make his own way. Talk to him with simple words in a friendly manner. Don't be intense, don't insist that he talk. The child who is temperamentally bashful will be even more silent if he feels that someone is pushing him.

All babies start out mispronouncing most of the words that they use, and gradually improve. But one continues to have trouble with one sound and another with another. Some of these mispronunciations are apparently due to real clumsiness of the tongue or other part of the speech apparatus. After all, some grownups still lisp no matter how hard they try. Other mispronunciations seem to be due to quirks in the child's feelings. He'll cling to the mispronunciation of one word long after he's learned to make the same sound correctly in another word. Minor delays like this are not important if the child is generally well adjusted, outgoing, and growing up in other respects. It's all right to correct a child occasionally in a friendly way. It's a mistake to be too serious or argumentative about it.

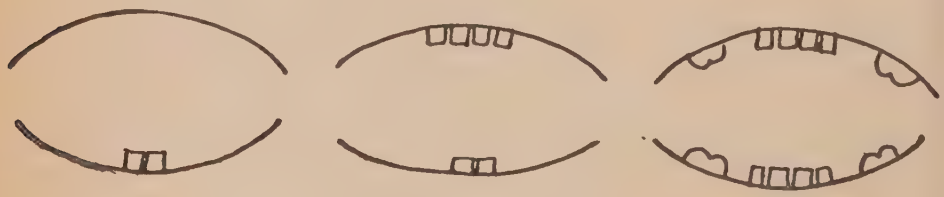
What about the child who has such clumsy speech at 4 or 5 or older that other children can't understand him and make fun of him? He might go to a speech expert if there is one who knows how to get along with a small child easily and can make the lessons appeal to him. But whether or not an expert is available, such a child needs regular association with other children as close to his own age as possible, preferably in a good nursery school, until he's ready for the grades. A good teacher can protect the child with a defect from the scorn of the other children in tactful ways, and can often coach him in talking more easily

than the parent because she isn't so worried about it. Some grade schools have trained speech teachers.

Deliberate baby talk comes up most often in the child who is jealous of a younger member of the family, who, he feels, is getting too much admiration and affection (see Section 279). There is another kind of affected baby talk in the child who has no rivals to worry about. I am thinking for instance of the little girl with corkscrew curls and fancy clothes, who is the only child of a doting family. They are so pleased with her as a plaything that they forget she has to grow up. They keep talking baby talk to her long after it is natural, and show her that they love her best when she acts babyish and "cute." You can't blame her for playing up to them. But she will have a tough time when she gets around with children her own age, because they won't think she's cute; they'll think she's awful.

TEETHING

150. Age of teething means little. Teething is quite different in different babies. One chews things, frets, and drools for 3 or 4 months before each tooth comes through, and makes life miserable for the whole family. In another case, a mother discovers a tooth one fine morning without ever having suspected before that her baby was teething.



One baby gets his first tooth at 3 months, another not till a year. Yet both are healthy, normal infants. It is true that certain diseases, once in a while, influence the age of teething. But this is rare. In a baby who is reasonably healthy, the age of teething is simply a matter of the pattern of development he was born with. In one family most of the children teethe early, in another late. You can't decide your baby is extra bright because he teethes early, that he's generally backwards because he teethes late.

151. How the average baby's teeth come through. The average baby gets his first one around 7 months, but he has been drooling, biting, and having periods of fretfulness from the age of 3 or 4 months. Since a baby gets twenty teeth in his first 2½ years, it is easy to see why he is teething most of that whole period. This also explains why it's so easy to blame every ailment on teething.

In the olden days it was the custom to blame teeth for colds, diarrhoeas, fevers. Of course these diseases are caused by germs and not by teething. However, in some babies it looks as though teething lowers resistance, making it *easier* for an infection to start at that time. But if your baby becomes sick while he's teething, or has a fever as high as 101 degrees, he needs a doctor to diagnose and treat the disease, just as much as if he had gotten sick when he wasn't teething.

Usually the first two teeth are the lower central incisors. (Incisor is the name given to the eight front teeth which have sharp cutting edges.) After a few months come the four upper incisors. The average baby has these six teeth, four above and two below, when he is a year old. After this there's usually a pause of several months. Then six more teeth are apt to come in, without much pause in between—the two remaining lower incisors, and all four first molars. The molars don't come in next to the incisor teeth, but farther back, leaving a space for the canine teeth.

These first four molar teeth, which in the average baby come through between a year and a year and a half, are more likely to cause a baby trouble than the others. He may be cranky and lose his appetite for days at a time. He may wake crying a number of times each night. This can be quite a problem if he doesn't fall asleep again quickly. A small bottle or cup of milk is sometimes the only thing that will pacify him. Is this risky? In most cases the baby will stop waking when the teeth are through. An occasional baby will develop a persistent habit of waking, especially if he is picked up for the bottle and given a sociable time. Therefore it's better to give the bottle in the crib, and to stop it firmly when the teeth are through.

What can you do throughout the day to help his discomfort? Give him something satisfactory to chew on. Rough rubber

teething rings of various shapes are good, but any piece of rubber that the baby can hold easily will do. You have to be careful about toys made from thin celluloid. Babies sometimes break off and swallow small bits. You also have to be careful that the baby doesn't gnaw the paint off furniture and other objects, if there is any danger that the paint is made with lead. Nowadays practically all babies' furniture and painted toys are made with leadless paint. You have to think about objects that have been repainted at home, or which were never expected to be chewed by babies. Some babies prefer a certain kind of cloth for chewing on. Let him have what he seems to want as long as it's not dangerous. You don't have to fret about the germs on a teething ring or a favorite piece of cloth. They are his own germs, anyway. Of course, it's a good idea to wash the teething ring with soap after it has fallen on the floor or after the dog has gotten it. If the baby chews on a piece of cloth, you can boil it occasionally. Some babies love to have their gums firmly rubbed at times. Don't use any medicine without the doctor's recommendation.



Once in a while a baby acts queerly at his feedings in the period between 4 and 7 months. The mother will say that he nurses at breast or bottle hungrily for a few minutes. Then he becomes frantic, lets go of the nipple, and cries as if in pain. He still seems very hungry. But each time he goes back to nursing, he becomes uncomfortable sooner. He takes his solid food eagerly. I am not sure that this distress is caused by teething, but I suspect that as the baby nurses, the suction engorges his painful gums and makes them tingle unbearably. You can break each nursing period into several parts and give the solid food in the intervals, since the distress only comes on after a number of minutes of sucking. If he is on a bottle you can enlarge the holes in a few nipples so that he gets the bottle in a shorter time. (Use

these easy nipples only while the trouble lasts, since they will prevent the baby, in the long run, from getting sufficient sucking satisfaction.) If the baby's discomfort is excessive and comes on very promptly, you could, for a few days, give up the bottle altogether. Give him his milk from the cup, if he is skillful enough, or from a spoon, or mix a large amount of it with his cereal and other foods. Don't worry if he doesn't receive his usual amount.

After the first molar teeth, there is a pause of several months before the canines (the pointed "dog teeth") come through in the spaces between the incisors and the molars. The commonest time is in the second half of the second year. The last four teeth in the baby set are the second molars. They come in right behind the first molars, usually in the first half of the third year.

152. **Let him chew.** Sometimes a mother thinks it's her duty to keep her baby from putting things in his mouth and chewing. This notion will surely drive her and the baby frantic in time. Most babies *must* put things in their mouths, off and on, at least from 6 months to 15 months. The best that a mother can do is to provide rubber, plastic, and wooden objects that are reasonably clean, and dull enough so that if the baby falls with them in his mouth they won't do too much damage.

153. **What makes good teeth.** The first thing to realize is that the crowns of all the baby teeth (the parts that will show) are formed in his gums before he is born. In other words, they are made from what the mother eats during her pregnancy. Research shows that among the food elements necessary to make strong teeth the following are particularly important: calcium and phosphorus (milk and cheese), vitamin D (cod-liver oil and sunshine), vitamin C (oranges, other citrus fruits, raw tomatoes, cabbage). Other factors are probably necessary, too, including vitamin A and some of the B vitamins.

The baby's permanent teeth, the first of which won't appear until he is about 6 years old, already are being formed within a few months after his birth. A baby at this age is of course getting plenty of calcium and phosphorus from his milk diet. He must get his vitamin D from some fish-liver oil from his earliest weeks. And if he is on cow's milk, he must get his vitamin C from orange juice or a pill.

154. Care of the teeth. It is sometimes recommended that a baby's teeth be brushed when he has his first set of molars. For most babies this would be in the first half of the second year. I think, myself, that there is something to be said for waiting until the child is nearly two. At this age he will have a passion to copy everything he sees done around him. If his mother and father brush their teeth, he will one day grab one of their brushes and insist on trying it himself. This is a good time to buy him a brush and let him go to it. Naturally he won't be very efficient at first, but you can help him tactfully. Perhaps I am making too much of a point of this, but it's a good example of a basic truth. Three quarters of the things that we think we must impose on children as unpleasant duties are things which they enjoy learning to do themselves at a certain stage of their development, if we will only give them a chance.

Dentists are not sure yet about *all* the causes of tooth decay. The proper diet of the mother and of the infant and small child are certainly important in the *formation* of strong teeth. But some teeth that look strong decay later. At the present time dentists suspect that the germs that cause holes in the teeth are favored by refined sugar and by lumps of crackers and other starches that get stuck in the teeth. That is why frequent candy-eating and lollipop-sucking are thought to be undesirable. Natural unrefined sugar, such as occurs in fruit, may contain protective substances that keep the sugar from having a harmful effect. This is a reason for using honey and brown sugar for sweetening foods.

The main purpose of brushing the teeth is to remove the lumps of food from around the teeth. The logical time is after meals, three times a day. Most important is after supper, so that the teeth will be clean for the long night period when the mouth is quiet and the saliva is flowing slowly. There is no proof that the green film which forms on some children's teeth is harmful.

It's wise to begin taking a child to the dentist every 6 months, beginning when he is 3 years old. He is coming into the period when tooth decay may start. The time to fill cavities is when they are small. This saves the teeth and it hurts the child less. Even if your child doesn't have a cavity at the 3- or 3½-year-old visit to the dentist, it is worth the expense for two reasons. It's

insurance that the teeth are healthy. It gets the child used to going to the dentist without fear. This confidence will make a big difference when he has to have his first filling.



Children want to do grown-up things.

Parents sometimes think that they don't have to worry about decay of the baby teeth because they are all going to be lost anyway. This is wrong. A decayed tooth may cause the child pain, and it sometimes leads to infection of the jaw. And if a baby tooth is so decayed or causes so much pain that it has to be pulled, it leaves a space in the jaw which allows near-by teeth to grow out of position. Then there won't be enough room for the permanent tooth when it's ready to come through. Remember that the last baby teeth are not lost until the child is 12 years old. So they need just as careful care as the permanent ones.

155. The permanent teeth. The permanent teeth begin to appear when the child is about 6 years old. The 6-year-old molars come through farther back than the baby molars. The first baby teeth to be lost are the lower central incisors. The permanent incisors, pushing up underneath, destroy the roots of the baby teeth, which get loose and then fall out. The baby teeth are lost in about the same order they come in: the incisors, the molars, the canines. The permanent teeth that take the place of the baby molars are called bicuspids. The substitution of the new teeth is completed somewhere around 12 to 14 years of age. Meanwhile the 12-year-old molars have come through behind the 6-year molars. The "18-year molars" or "wisdom teeth" come considerably later (sometimes never).

When teeth come through crooked or out of place, there is some tendency for them to straighten out later, how much one cannot tell ahead of time. Your regular dentist, who should be seeing your child's teeth every 6 months, can advise you whether he needs special treatment for this.

Changes in Diet and Schedule

The doctor who is taking care of your baby and knows his digestion is, of course, the one to advise you about these changes. The specific directions in this chapter are for parents who are unable to consult a doctor regularly.

ADDING SOLID FOODS

156. Let him enjoy his first solid food, whether it's cereal or something else. There's no exact time when it's important to start solid food. Fifty years ago it was begun when a baby was a year old. As the years have passed, doctors have experimented with giving it earlier and earlier, and found that babies took it and prospered. There are two definite advantages in starting in

the first half year. Babies take to the idea more easily than when they are older and more opinionated. And a variety of solid foods adds substances to the diet that are scanty in milk, particularly iron.

Nowadays doctors customarily recommend the first solid food sometime between 3 and 6 months. There is no great advantage in beginning much before 3 months of age, because the baby's inexperienced digestive system doesn't make much use of it. It passes through into the bowel movement largely undigested. The baby's hunger and his digestive system may both influence the age at which the doctor suggests starting solids. A baby of 2½ months, who is not getting *quite* enough breast milk to satisfy him, might well be started early on his solid food to avoid a supplementary formula. On the other hand, if a baby has been on the edge of diarrhoea all the time he was on formula alone, the doctor may prefer to wait longer than usual before introducing solids, for fear of upsetting the digestion further.

The exact order in which solids are introduced is not important, either. Cereal is commonly given first. It is a bland food which is easily digested. The only disadvantage is that its taste doesn't have a great appeal to many babies. Formerly mothers had to cook cereal for an hour and a half. Nowadays they can mix a precooked cereal with formula, or milk, or water, and it is ready. There are a number of precooked baby cereals on the market. Some of them are enriched to provide extra vitamins and salts. Different babies prefer different ones.

A doctor usually recommends starting with a teaspoonful and working up gradually, say a teaspoonful a day, up to 2 or 3 tablespoonfuls if the baby wants it. This gradualness is to make sure the baby won't be upset. You shouldn't take the business of 1 teaspoonful, 2 teaspoonfuls, 3 teaspoonfuls, too literally, though. There are lots of babies who don't want to increase that fast, at least in the beginning. It's all too strange to them. There's no rush.

A baby taking his first teaspoonful of solid food is quite funny and a little pathetic. He looks puzzled and disgusted. He wrinkles up his nose and forehead. You can't blame him. After all the taste is new, the consistency is new, the spoon may be new.

When he sucks on a nipple, the milk gets to the right place automatically. He's had no training in catching hold of a lump of food with the front of his tongue and moving it back into his throat. He just clacks his tongue against the roof of his mouth, and most of the cereal gets squeezed back out onto his chin. You will have to shave it off his chin and scoop it back into his mouth. Again a lot will be oozed out frontwards, but don't be discouraged—some goes down inside, too. Be patient until he is more experienced.

It doesn't matter much which meals you start the solids at. Just don't give it at the feeding when he's least hungry. Cereal is usually given at the 10 A.M. and 6 P.M. feedings.

Before or after the milk? This is an important point. It depends on what kind of a baby you have. Some babies, especially the ravenous ones, *must* have their milk first when they are hungry. They get furious if you offer them solids first. But they like them at the end of tne meal. The other kind of baby, usually the less hungry kind, will take his solid food only at the beginning of the meal. He's too full after his milk to want to bother. You won't know which way your baby will take it best until you have tried. Offer him the solid food first. If it makes him angry, give him his milk right away, without fussing, and try the solid at the end.

It's a good idea, if you are starting with cereal, to mix it (with formula or milk) thinner than the directions on the box say. Then it will seem more familiar to the baby and be easier for him to swallow. If your baby is on a formula, you will use some of that to mix with the cereal. Some babies, however, miss any formula that is taken out of the bottle. In that case, or if the baby is on the breast, use pasteurized milk to make the cereal. You do not need to boil it, if your doctor agrees it is safe enough. If you have no fresh milk, use equal parts of evaporated milk and water to mix with the cereal. Of course, you can use plain boiled water, but this is less likely to appeal to the baby.

You can give ordinary cereals instead of the specially precooked ones if it's convenient for you to cook them for an hour and a half. Start with the fine white cereals. By 6 months you can give the fine, brown, whole-grain cereals, and by 9 months the coarse ones like oatmeal. Thicken over the open flame, cook

for the rest of the 1½ hours in a double boiler. For "quick-cooking" or "5-minute" cereals, cook for 20 minutes over the open flame. Add salt "to taste" to all cereals.

By the time a baby is 6 months old, it's preferable to give whole-grain cereals (which have a tan or brown color), either cooked or precooked, because the refined, white cereals are missing much of the vitamins and other valuable food elements. However, a few babies get loose bowel movements from some whole grains until they are older.

157. **The baby who balks at cereal.** You will know within a day or two of starting how your baby is going to take to cereal. Some babies seem to decide, "It's queer, but it's nourishment, so I'll eat it." As the days go by they grow more and more enthusiastic. They open their mouths for it like birds in the nest.

But there are other babies who decide on the second day of cereal that they don't like it at all. And on the third day they dislike it more than on the second. If your baby feels this way, be careful. Take it easy. If you try to push the cereal into him against his will, he will get more and more rebellious. You will get exasperated, too. In a week or two he may become so suspicious that he balks at the bottle, too. Offer the cereal just once a day. Only give him enough to cover the tip of the teaspoon until he is used to it. Add a pinch of sugar to see if he likes it better sweet. If in 2 or 3 days he is getting more set against it, in spite of all these precautions, then stop altogether for a couple of weeks. If he still balks when you try again, report it to your doctor.

I think it's a great mistake to get into an argument with a baby about his first solid food. Sometimes a long-lasting feeding problem starts in this way. Even if it doesn't last, it's bad for mother and baby to have gone through an unnecessary fight.

If you have no doctor to advise you, I suggest that you start with fruit instead of cereal. Babies are puzzled by fruit, too, the first time they have it. But within a day or two practically all of them decide they love it. By the end of 2 weeks they are ready to assume that anything that comes on a spoon is wonderful. Then you can add cereal, too.

158. **Starting fruit** (if you cannot consult a doctor). Fruit is commonly introduced any time between 3 and 6 months. If

your baby has a good digestion, start at about 3 months. I think the best fruits to begin with are applesauce and raw, ripe banana. They are popular, and they seldom cause indigestion. You can use the applesauce canned for babies. If you use what you make at home, do not sweeten it too much, and put it through a fine strainer. The banana should be *very* ripe. It should have black spots on the skin and be tan-colored inside. Mash it fine with a fork. Add a little formula or milk if it seems too thick for your baby. Start with not more than a teaspoonful of applesauce or banana the first day, at the beginning or end of the 10 A.M or 6 P.M. feeding. Wait until the baby seems to like it before trying to increase. Then add about a teaspoonful more each day. You can go up gradually to a whole banana, if the baby wants it, or up to half of one of the baby cans of applesauce. There is no harm in going beyond a half can as long as it agrees with him. But most babies are satisfied with a half, and that is a convenient place to stop. You can stick to either banana or applesauce in the beginning, or you can alternate them. If your baby likes one and not the other, use the one he prefers for a while. If you have an icebox, you can use an opened can of applesauce for 3 days. If you have no refrigeration, better not use it after 24 hours. (Then give it 2 days straight, before shifting to another fruit.)

If you started with fruit, then, in 2 or 3 weeks add cereal at another feeding, say at 6 P.M. If your baby hasn't gotten to love the fruit, wait longer to start the cereal, because there is less chance of his liking that. Increase the cereal gradually, about a teaspoonful more a day, if the baby wants it, up to 2 or 3 tablespoonfuls. If he loves it and is hungry you can give the cereal twice a day, adding it to the 10 A.M. feeding also, along with the fruit. If he's hungrier at 6 P.M., give cereal and fruit then, and cereal alone at 10 A.M.

Then begin to alternate the applesauce and banana with other fruits. There are canned strained apricots, prunes, pears, peaches, pineapple, and various mixtures for babies. Or you can stew and strain your own fruit. One is as healthy as the other. Increase prunes cautiously. They cause cramps and looseness of the bowels in some babies. If there are some varieties your baby doesn't like after several tries, don't worry about them.

Leave them out for the time being, but try them again in a month, he may have changed his mind.

159. **Adding vegetable** (if you cannot consult a doctor). When your baby is, say, 4 months old and taking his fruit and cereal well, add puréed vegetables at the 2 P.M. feeding. The cans of strained vegetables for babies, or fresh vegetables boiled the way you prepare them for yourself and then strained, are equally good. Suitable vegetables are string beans, spinach, peas, carrots, asparagus, chard, summer and winter squash, tomatoes, beets, onions, celery. The vegetables which are not usually given to babies because they are apt to be less digestible are cauliflower, cabbage, turnips, parsnips, broccoli, corn, lima beans. Now, if you are in a situation where you can get hardly any of the vegetables in the first list, you can experiment cautiously with the vegetables which have a reputation for being less digestible. In other words, it is better for the baby to have some kind of vegetable every day, if it doesn't upset him. However, most babies dislike cauliflower, turnips, and parsnips from the word go. Don't ever try to make a baby take a vegetable or any other food that he is sure he doesn't like after he's been given a taste for 2 or 3 days. You can always try again in a month, though, and see if his taste has changed.

Increase the vegetables gradually up to half a baby can or 2 or 3 tablespoonfuls, depending on how much he wants. You can of course, increase beyond half a baby can if he seems very hungry. Keep the unused half can of vegetable in the icebox to finish up the next day. Do not use an opened can of vegetable, or any cooked vegetable, after 24 hours. Cooked vegetables are apt to spoil rapidly. Do not use it even the next day if it cannot be kept cold.

Babies are more likely to be choosy about their vegetables than about their cereal or fruit. You will probably find that there are one or two vegetables that he doesn't like. Don't urge them, but try them again every month or so. There's no point fussing over a few foods when we have so many to choose from. Some babies are much more enthusiastic about vegetables if a little salt is added for flavoring, and there is no harm in this.

It's common for undigested vegetable to appear in the bowel movements when the baby is first taking it. This is not a bad

sign as long as there is no looseness or mucus, but increase slowly until his digestion learns to handle it. If a vegetable causes looseness or much mucus, cut the amount way down and increase cautiously. If he can't take any of it without trouble, cut it out altogether, but try a very small amount in another month.

Spinach makes the lips of some children red and chapped, and it may make the buttocks red around the anus. If this doesn't bother him, you can go on with it. Beets occasionally make the urine red, as well as appear red in the bowel movement.

160. Egg yolk, hard-boiled (if you cannot consult a doctor). By about 5 months start hard-boiled egg yolk. Egg is more likely to cause allergy than other foods, especially the white. It's the yolk that contains the valuable iron and vitamins. That's why you give just the yolks for the first few months. Thorough cooking of a food makes it less apt to cause allergy, that's why you hard-boil the egg. Use very small amounts at the start, say ¼ teaspoonful, ½ teaspoonful, ¾ teaspoonful, 1 teaspoonful, 1½ teaspoonfuls, 2 teaspoonfuls, etc., up to the whole yolk. If the baby vomits it or develops a rash, stop serving it. Many babies dislike the taste and consistency of plain hard-boiled egg yolk. If your baby will take it mixed with milk and flavored with salt, give it that way. If not, mix it with the vegetable or cereal. If this makes him refuse those foods, too, let the egg go for the time being. He will probably take a soft-boiled or coddled egg when he is older. It is sometimes considered safer not to offer soft-boiled egg, including the white, until the baby is about 10 months old for fear of starting an allergy. When you do start whole egg, you should begin with very small amounts again, even though the baby has been taking the entire yolk right along. When you add meat to the diet, serve the egg at breakfast or at supper.

161. The meals at six months (if you cannot consult a doctor). By the time your baby is 6 months old, he will probably be eating cereal, egg yolk, and a variety of fruits and vegetables. The conventional arrangement is to give the vegetable at the 2 P.M. feeding, cereal at 6 P.M. and probably also at 10 A.M., and fruit at 10 or 2 or 6. There are no hard and fast

rules about this. It all depends on your convenience and your baby's appetite. For instance, if he's not a very hungry baby and wants only one solid food at each meal, you could give fruit alone at 10, vegetable at 2, and cereal alone at 6. If he is pretty hungry, give him cereal twice a day, and give the fruit along with the other solid at any of the 3 meals that is most convenient. If he tends to be constipated, you can give him prunes every night along with his cereal, and another fruit at his breakfast or lunch.

162. **Simple puddings if convenient** (if you cannot consult a doctor). Puddings aren't as important for most babies as the other foods. They don't add any new element to the diet, they take time to prepare. Fruit makes a more valuable dessert and one that most children prefer. However, if you just love to cook or are making puddings for your family anyway, you can begin giving them to the baby for lunch or supper around 6 months. Jello, junket (any flavor), and custard are easily digested and smooth. When he's nearer a year old and getting used to lumps, you can add rice pudding and tapioca pudding occasionally. Some babies are upset by chocolate, so wait on chocolate-flavored puddings until he is 2 years old.

Puddings may be important in special cases. If your baby around a year loses most of his desire for milk as a drink, you can get several ounces into him each day in pudding form. Puddings may also be helpful for the rare baby who is "fed up" with each food after a few spoonfuls. He may like pudding as an extra dessert, in addition to fruit. Puddings are also helpful when a baby turns against cereal for supper. Then supper can be fruit and pudding, or vegetable and pudding.

163. **Zwieback and bread crust around 6 months.** You can give your baby a piece of zwieback or bread crust around 6 months. At this age he can hold it in his hand and put it in his mouth when he wants to. Start with a small piece, at the end of the meal. If he needs more than just juice between meals, when he goes on a 3-meal-a-day schedule, give him the bread crust or zwieback at that time, too.

Some babies love zwieback, others find its hardness very uncomfortable. If your baby dislikes it, use dry bread crust instead. Neither of these foods adds anything vital to the diet.

They are important for two other reasons. They get the baby used to feeding himself, and they give him something to chew on at this period when he is apt to be teething. He'll make a mess with them, but you can't worry about that.

164. Adding potato if your baby likes it and needs it. Other starches (if you cannot consult a doctor). Potato, baked or boiled, can be introduced into the diet any time in the last half of the first year. A logical time is when the baby goes onto a 3-meal-a-day schedule. When his lunch is 5 or 6 hours away from his supper, the starch, which a potato is mostly made of, supplies lots of energy (or calories) to last through the afternoon.

A word of caution about potato. Babies are more apt to gag and rebel against it than any other food. I don't know whether this is because it is grainy or because it is sticky. So mash it very smooth at first, make it thin by mixing with plenty of milk, and offer it in very small amounts until he gets used to it. Don't urge it on him if he continues to gag. Forget about it, at least for a month, and then try again.

If your baby is pretty fat and seems content with a lunch of green vegetable, fruit, egg yolk, and milk, leave out potato. It doesn't supply anything new to his diet except a large number of calories.

You can occasionally substitute macaroni, spaghetti, noodles, rice for potato. Strain or mash them fine at first.

165. Canned "meat soups" are good, but not essential (if you cannot consult a doctor). There are a variety of beef, lamb, liver, pork, and chicken "soups" for babies. They consist mostly of a starch such as barley or rice, along with vegetable and a little meat. They are often given for lunch around the middle of the first year, for instance at 7 months. You can, if you want, give them 2 to 7 times a week, depending on how much the baby likes them and how easily you can afford them. They are less important than fruit, vegetable, egg.

I would count the "soup" as a starch and a meat, serve it along with the regular vegetable, and omit the potato or other starch that meal. When the baby begins to take fresh meat, you omit the "meat soup" at those meals. If you can't get fresh meat regularly, the "meat soups" are a fair substitute. If you cannot

afford "meat soups" *and* eggs, eggs are more valuable. If your baby is allergic to some foods, keep away from "meat soups"; they contain a confusing mixture.

166. **Adding real meat (if you cannot consult a doctor).** Meat is most commonly added around the age of 9 months. When a doctor brings up the subject, mothers often say, "But has the baby got enough teeth to eat meat?" He doesn't need teeth to eat scraped or ground meat. Start with beef. It's preferable to scrape it at first so that there won't be any tough morsels for him to gag on. Buy a piece of top round, sear it briefly on all sides in a pan without grease. This sterilizes the surface and seals in the juices. It will be raw inside. Now hold it firmly with one hand and scrape it "with the grain" with a strong spoon. This removes the tender red meat and leaves the tough gristle behind. Flavor with salt. Start with a teaspoonful and work up to a couple of tablespoonfuls as the baby gets used to it.

Most babies are a little puzzled by meat at first, because it is the first food that doesn't soften and crumble in the mouth. But they almost all love it in a day or two. After a week or two you can try changing to ground beef, which is less wasteful. Buy the beef in a piece, sear it as before, and then put it through a grinder or chop it very fine. Now you can branch out into other meats: broiled lamb chop, chicken (light or dark meat), calves' or chicken liver, bacon. (Bacon contains little real meat.) The meats canned especially for babies and children are as nourishing as fresh meats.

You can serve meat anywhere from 3 to 7 times a week. In fact, it's not absolutely necessary to serve it at all if a child is getting at least an egg a day and drinking plenty of milk. But it's good to provide it for the sake of variety and completeness, if you can get it and afford it.

167. **Meat juice is nice but wasteful. Broth tastes strong but isn't.** Beef juice, prepared by squeezing meat, is delicious and nourishing, but it's very expensive and wasteful. Most of the nourishment is left behind in the dry piece of beef. All but a few families can spend their food allowance more advantageously for other things.

Broths contain very little nourishment—mostly water, salt, and flavoring. They are perfectly all right to give to babies, but not important.

168. Adding fish (if you cannot consult a doctor). You can add fish to the diet by the age of a year. Serve only the white fish that does not contain much oil, such as flounder, haddock, halibut, cod. The oily fish, like mackerel, are apt to be indigestible. Fish can be boiled, baked, or broiled. Substitute it for meat at lunchtime. Some babies love it, and then it's a great help. But a lot of babies turn thumbs down. Don't try to force it.

169. Lumpy foods by a year, and how to avoid gagging. Somewhere between 9 and 12 months you'll want to get your baby used to lumpy or chopped foods. If he goes much beyond a year eating nothing but puréed things, it will be harder and harder to make the change. People have the idea that a baby can't handle lumps until he gets a fair set of teeth. This isn't true. He can mush up lumps of cooked vegetables and fruit or pieces of zwieback with his gums and tongue.

Some babies seem to be born more squeamish about lumps than others. But most babies and older children who gag easily on particles of food have become that way, either because the mother tried to make the change to chopped foods too abruptly or too late, or because she has been forcing food when the child didn't want it.

There are two important points in shifting to chopped foods. Make the change a gradual one. When you first serve chopped vegetables, mash them up pretty fine with a fork. Don't put too much in the baby's mouth at a time. When he's used to this consistency, gradually mash them less and less. The other way a baby gets used to lumps is by being allowed to pick up a cube of carrot, for instance, in his fingers and put it in his mouth himself. What he can't stand is to have a whole spoonful of lumps dumped in his mouth when he's not used to it.

The child beyond the age of a year who can't tolerate anything but puréed food has usually been fed forcibly, or at least urged vigorously. It isn't so much that he can't stand lumps. What makes him gag is having them pushed into him. The mothers of gagging children usually say, "It's a funny thing. He can swallow lumps all right if it's something he likes very

much. He can even swallow big chunks of meat that he bites off the bone." There are three steps in the curing of a gagger. The first is to encourage him to feed himself completely. (See Section 217.) The second is to get him over his suspiciousness about foods in general. (See Sections 354 to 368.) The third is to go unusually slowly in coarsening the consistency of his food. Let him go for weeks—or even months if necessary—on puréed foods, until he has lost all fear of eating and is really enjoying it. Don't even serve him meats, for instance, during this time if he cannot enjoy them finely ground.

In other words, go only as fast as the child can comfortably take it.

170. Diet by the end of the first year (if you cannot consult a doctor). In case you are mixed up by all the things that have been added to the diet, here is a rough list of what babies are apt to be eating by the end of the year.

Breakfast: cereal (preferably brown), egg (whole, soft), toast, milk

Lunch: vegetable (green or yellow, in lumps), potato (or macaroni, etc.), meat or fish (a canned meat soup may be substituted for the meat and potato), fruit, milk

Supper: cereal, fruit, milk

Fruit juice (including orange juice)is given between meals or at meals. Fish-liver oil daily. Zwieback, toast, bread (preferably whole-grain), plain crackers can be given at meals or between, with a little butter or margarine. A simple pudding can be substituted for one of the fruit desserts. The fruit is stewed except for banana and scraped apple.

In other words, a pretty grown-up diet.

CHANGES IN SCHEDULE AND BOTTLE

171. When to omit the 10 p.m. feeding (if you cannot consult a doctor). When you give up the 10 or 11 P.M. feeding should depend on when the baby is ready. There are two things to consider. The first is whether he is ready to sleep through the night. You can't be sure that he's ready just because he always has to be waked up at 10 or 11. If you don't wake him, he may awaken himself around midnight. Better wait until you have had to wake him for several weeks. Then see if he will sleep

through. If he wakes hungry later in the night, feed him and go back to the evening feeding for a few more weeks.

Of course, if a baby is very small or gaining slowly or having trouble with his digestion, it may be better to keep the evening feeding going a while longer, even if he is willing to sleep through without it.

The other point is whether he is sucking or trying to suck his thumb or fingers a lot. If so, it may mean that his sucking instinct is not being satisfied. If you cut out a feeding at this time, you deprive him further and make it necessary for him to suck his thumb even more. (See Section 125.) However, if he continues to be a thumb-sucker, in spite of all your efforts to satisfy his sucking craving, you don't have to go on *forever* giving him the evening feeding. For one thing, as he gets older, he may refuse to wake up, no matter how hard you try, or fall asleep again as soon as he has taken a couple of ounces. I'd stop the feeding by this time, anyway, whether he is sucking his thumb or not.

In a general way, then, let your baby give up his 10 P.M. feeding when he shows that he can sleep through without it and get enough sucking satisfaction without it. This will probably be between the ages of 3 and 6 months. Wait till 5 or 6 months if he is sucking his thumb much, and willing to take the evening feeding. When you omit the evening bottle, distribute the formula into the other 4 bottles. This will probably make about 7½ ounces in each bottle. But if he only wants his usual 5 or 6 ounces, let it go at that, without any urging. 20 to 24 ounces a day is plenty if he's satisfied.

172. **If your baby loses his appetite between four and nine months** (if you cannot consult a doctor). A baby may take solids eagerly for the first month or two, and then rather suddenly lose a lot of his appetite. One reason may be that at this age period he is meant to slow down in his weight-gaining. In his first 3 months he has probably gained close to 2 pounds a month. By 6 months he is apt to be down to a pound a month. Otherwise, he would become too fat. Also, he may be bothered by teething. One baby wants to leave out a lot of his solid food, another turns against his milk.

If your baby loses a lot of his appetite, *don't* urge him. There

are two things you can do. The first is to gradually remove the sugar from his formula (Section 173). The sugar was there in the early months principally to give him enough calories while he was on a diluted cow's-milk formula. He doesn't really need these sugar calories when he is eating a good helping of solid food 3 times a day. In fact, the very sweetness of the formula may be killing his appetite for other unsweetened foods.

The other thing you can do, is to go from the 4-hour schedule during the daytime (6 A.M., 10 A.M., 2 P.M., 6 P.M.) to a 3-meal-a-day schedule (approximately 7 A.M., 12 noon, 5 P.M.), whether or not he is still on an evening feeding (Section 174).

If a baby's appetite still doesn't revive with these two measures, it's important to get him to the doctor, to be sure that he's otherwise healthy. Anemia, for instance, which is not rare at this age, may be responsible.

173. **When to remove the sugar from the formula** (if you cannot consult a doctor). You will want to remove the sugar from the formula gradually, when your baby is somewhere between 4 and 9 months of age. The time will depend on his appetite. If he goes through a phase of poor appetite at the age of 4, 5, or 6 months, that is a good time to take out the sugar. If, on the other hand, he is the kind of baby who never seems to get enough to eat and is always hungry ahead of mealtime, then leave the sugar in until he is 7 or 8 months old.

Remove the sugar gradually, so that he won't notice any sudden change in taste. You can remove a teaspoonful a day from the formula until there is none left. (3 teaspoonfuls make a tablespoonful.)

174. **When to put the baby on three meals a day** (if you cannot consult a doctor). This depends on when your baby is ready for it. It may be anywhere between the ages of 4 and 10 months. A 3-meal schedule means that there are about 5 hours between meals. If your baby is starved at the end of 4 hours and crying with hunger, he isn't ready for a 3-meal schedule, no matter how old he is. If he has to have his first feeding by 6 A.M. there's usually not much use talking about 3 meals a day.

On the other hand, your baby may have reached the stage when he is definitely unready to eat after 4 hours. A mother will

say, "He only eats well at every other meal. If he finishes his 6 A.M. bottle, he'll eat poorly at 10, well at 2, and poorly at 6 P.M." Babies who are acting like this need to be changed to a 3-meal-a-day schedule so that they will be hungry at mealtime. Otherwise they are apt to become feeding problems.

If a baby is thumb-sucking a lot, and is still ready to eat every 4 hours, this would be a reason for leaving in the fourth feeding for a while longer.

Once in a while there is a baby who is no longer ready to eat every 4 hours during the daytime, but who still wakes up like clockwork for his 10 P.M. bottle. There's no problem here. You try to adjust to the baby's needs as usual, put him on 3 meals during the day and continue to give the 10 P.M. feeding until he is ready to sleep through.

There's another problem that turns up occasionally. A baby will seem to have outgrown the 4-hour schedule. He's not hungry for some of his meals. And yet he's still waking around 6 A.M. yelling with hunger. How do you put him on 3 meals a day and still feed him at 6 A.M.? The easiest way is to give him his milk from breast or bottle as soon as he demands it in the morning, and then give him his cereal, or his cereal and fruit, a little later, as soon as it is convenient (for instance, between 7 and 8). His next meal will be lunch around noon. Of course the baby who is hungry early is no problem if the whole family breakfasts around 6 A.M. Some babies who wake early will be quite satisfied with a bottle of orange juice for the time being. Then they can have their milk along with the rest of their breakfast, later.

Another factor is the mother's convenience. Suppose she has her hands full preparing meals for her older children, and that her baby is *able* to go more than 4 hours between meals, even though he is still willing to eat that often. This mother will naturally want to get the baby onto the same three meals as the older children now, and there is no reason why she shouldn't, especially if he isn't thumb-sucking much. There are other mothers, especially with the first baby, who find the 4-hour schedule fits their own convenience better than 3 meals a day. There is no reason why these babies shouldn't stay on the 4-hour schedule longer than average as long as they remain

hungry for their meals that often. In other words, there is no rule about making such a change in a baby's routine. It's just a matter of reasonableness and common sense. You see what the baby is ready for and fit it in with your convenience.

The hours at which a baby is fed when he goes onto 3 meals a day will depend largely on the family's habit, somewhat on the baby's hunger. Breakfast is usually between 7 and 8, but can be later if he's willing. He will get cereal and fruit (one *or* the other if he has a small appetite) and his milk. In the middle of the morning he will probably need something to help him last through until lunch. Orange juice, about 2 ounces, is best. If he doesn't drink orange juice, you could give him pineapple juice, prune juice, or tomato juice. If he gets *very* hungry before meals, add a piece of zwieback or dry bread crust or plain cracker.

Lunch will come in the neighborhood of 12 o'clock. Some babies must have it by 11:30. It will probably consist of a green or yellow vegetable, a hard-boiled egg yolk, potato, and milk. Potato is usually added at the time a baby goes on 3 meals a day, to give him enough extra energy to last through the afternoon. You don't bother with it if your baby has a small appetite, or is getting fat. Fruit may be given anyway at lunch, if this is the most convenient time of day or if your baby is hard to fill up. A baby should get fruit once or twice a day, but there is no harm in 3 times a day if it agrees with his digestion.

In the middle of the afternoon he will need a snack, another 2 ounces of orange juice or another fruit juice. Occasionally a mother will say that it suits her baby best, for the first month or two after he gets on a regular breakfast, lunch, supper schedule, to give him an extra breast or bottle feeding about 3 P.M. Of course, this still means 4 milk feedings a day, though such a baby may only want half a bottle at 3 P.M. and 6 P.M. This extra bottle or half bottle in the middle of the afternoon is called for only if the mother wants his supper to be late, around 6, and if the baby has a very large appetite. Ordinarily milk is not given between meals, because it stays in the stomach for 3 or 4 hours and takes away the appetite for the next meal.

Supper is usually given sometime between 5 and 6 P.M. when a baby goes on 3 meals a day. Most babies can't last be-

yond 5 if lunch was at 12, and some need to be fed even earlier. Supper will usually be cereal, fruit, and milk.

When a baby is taking milk only 3 times a day, he will be getting a smaller total for the day than formerly, because he will probably not want more than his usual 6 to 8 ounces a meal. Don't worry about this. Don't try to tuck a few extra ounces into him at odd hours to keep up to the old 30-ounce total. Most babies will be quite safe if they are taking as much as 20 ounces a day. On the other hand, if your baby is the unusual one who wants as much as 10 ounces a meal, give it to him.

175. **When can you stop boiling the formula and bottles?** (if you cannot consult a doctor). The answer to this question depends on so many different things that you ought to take it up with your doctor even if you can consult him only on rare occasions. But for those who can't, I'll mention some of the factors. The reason that you have to be so careful with the formula and bottles is that germs multiply rapidly in milk, especially when it's not kept cold, and babies catch intestinal infections easily. Babies don't suddenly outgrow this tendency at any one age. They are almost as susceptible during the second year as during the first.

By the time a healthy child in healthy surroundings is completely weaned to the cup, doctors feel that it's usually no longer necessary to boil the milk (*as long as it is pasteurized*). A clean cup won't have many germs, and there is no chance for them to multiply in the milk before the child drinks it.

A doctor will be slower to advise leaving the milk unboiled if a baby is particularly susceptible to diarrhoea, or if the weather is hot, or if there isn't a good refrigerator, or if there is a question about the purity of the milk supply. Raw (unpasteurized) milk should be boiled throughout childhood.

If you have no doctor to advise you, I'd recommend that you continue to boil milk and bottles until your baby is completely weaned to the cup.

Weaning from Bottle to Cup

(Suggestions for those who cannot consult a doctor)

READINESS FOR WEANING

176. Starting sips from the cup at five months. It's a good idea to begin offering your baby a sip of milk from the cup each day by the time he's 5 months old. You aren't going to try to wean him to the cup right away. You only want to accustom him to the idea that milk comes in cups too, at an age when he's not too opinionated. If you wait till he's 9 or 10 months old to start, he is likely to bat the cup away indignantly, or at least pretend that he doesn't know what it is for.

Pour half an ounce of the formula into a small cup or glass, such as a nipple cover, once a day. He won't want more than one sip at a time, and won't get much at first, but he'll probably think it is fun. If he is a breast-fed baby, pour half an ounce of pasteurized milk (from a well-shaken-up bottle) into a cup. It isn't usually necessary to boil this as long as it is pasteurized, but your doctor is the one to advise you on this point.

You may already have begun to give your baby orange juice from a cup or glass. If not, you can start that now, too. But the thing to remember is that a baby who is getting used to orange juice from a cup isn't getting used to the idea that milk can also come that way. (See Section 179 on helping a baby to like the cup.)

177. Some are ready for weaning early, others not. The baby who has been satisfied with a moderate amount of sucking time at breast or bottle, and who has never had much interest in his thumb, may show his readiness to be weaned to the cup as early as 8 months of age. His mother will say, "He's getting bored with the bottle. He often leaves a lot and stops to play with the nipple with his fingers. (On the breast he may be

nursing for shorter and shorter periods.) When I offer him milk from the glass he takes it eagerly." The baby who acts this way is showing, I think, that he's ready for gradual weaning.

At the opposite extreme is the baby with a strong and long-lasting sucking instinct. He's more apt to be a thumb-sucker. At 9 or 10 months his mother will say of him, "Oh, doctor, how he loves his bottle! He watches it all the time he's taking his solid food. When it's time, he snatches it eagerly. He strokes the bottle lovingly and murmurs to it all the time he's taking it. He always finishes it to the last drop. He's very suspicious of milk in the cup. Sometimes he won't touch it at all, other times he takes a sip or two and then pushes it away impatiently."

WEAN HIM GRADUALLY

178. Take it easy and follow his lead. Let's say you have been giving your baby a sip of milk a day from the cup from the age of 5 months. When he's 8 or 9 months old you ask yourself, "How's he doing?" If he's becoming a little bored with his bottle and likes milk from the cup, gradually increase the amounts in the cup. Give him the cup at every meal. This leaves less and less in the bottles. Then leave out the bottle that he takes least interest in, probably the lunch or breakfast one. In a couple of weeks give up the second bottle, if he's progressing, and then the third. Most babies love their supper bottle most and are slowest to give it up. Others feel that way about the breakfast bottle.

Willingness to be weaned doesn't always increase steadily. Misery from teething or a cold often makes a baby want more of the bottle for the time being. Follow his needs. The trend that made him start to give up the bottle before will set in again when he feels better.

But suppose yours is another kind of baby. He's had a sip of milk daily, from 5 months. At 9 months, instead of being willing to take more, he's turning against it. Sometimes he's willing to take one sip from the cup and then pushes it away impatiently. Mostly he won't let it near his lips. A cagey baby will pretend he doesn't know what it's for. He lets the milk run out at the sides of his mouth, smiling innocently. The baby who is against the cup at 9 or 10 months is apt to be devoted to his

bottle. He's nowhere near ready to give it up yet. Let him go on with it. Offer him a sip from the cup each day, if it doesn't make him cross. If one sip is all he takes, don't even try to give him two. Act as if it doesn't make any difference to you. If he refuses even a sip, offer it only every 2 weeks or so.

He may relent a little at 12 months, but it is more likely that he'll remain suspicious till about 1¼ or 1½ years. If you take it seriously, you'll get exasperated, which won't get you or the baby anywhere. Try to relax, forget when the neighbor's baby was weaned. Think how you'd feel if a big bossy giant, who had you in his power and who didn't understand your language, kept trying to take your coffee away and make you drink warm water out of a pitcher. If you get into a real struggle, he will probably cling to his bottle much longer than he would have otherwise, and possibly refuse milk in a glass for months or even years. Sometimes a battle over weaning starts a feeding problem, and this may bring other behavior problems in its wake.

When a suspicious baby does start to take a little milk from the cup, you must still be patient and casual, because it will probably take several more months before he is ready to give up the bottle altogether. This applies particularly to the supper or bedtime bottle. That's the time of day when most babies and children want their old-fashioned comforts.

So far, I have been cautioning you against forced weaning, against taking away the bottle that the baby is still eager to have, against pushing a cup at him that only makes him angry. Now I had better turn around and say that sometimes a baby is kept on the bottle longer than he needs to be, because his mother worries about the fact that he isn't taking as much from the cup as he used to take from the bottle. Let's say that at 9 months he's drinking about 6 ounces from the cup at breakfast, 6 ounces at lunch and about 4 ounces at supper, that he's not especially eager for the bottle, but that if his mother gives it to him at the end of the meal he is willing to take a few ounces more that way. I think that a baby over 8 months who is taking as much as 16 ounces a day from the cup, and not acting as if he missed the bottle, might better be off the bottle altogether. If he is kept on it now, he may become *less* willing to give it up at that suspicious age between 10 and 15 months.

It's my impression that most breast-fed babies show their willingness to be weaned before they are 12 months old, whereas many bottle babies become even more attached to their bottles as they get near a year. I have an idea that may explain this in some cases. Many an infant is impatient of being held snugly in his mother's arms by 9 or 10 months. I suspect it is one of the reasons he becomes restless at the breast and willing to give it up. This is the age when the bottle-fed baby wants to pull the bottle out of his mother's hand and feed himself. She, being practical, gives it to him and puts him to bed. He polishes off his milk and puts himself to sleep, all in one process. In other words, the bottle-fed baby who wants to "graduate" from his mother's arms can do it without having to give up the old pleasure of nursing from a nipple. For this reason, a mother who would prefer her baby to be weaned to the cup by 12 months had better not put him to bed with his bottle. I wouldn't recommend, though, trying to keep him from holding his bottle when he's sitting in your lap. You want to encourage him to do things for himself, and you don't want to get into unnecessary arguments.

179. **Helping a baby to like the cup.** When he's 6 or 7 months old, and wants to grab everything and put it in his mouth, give him a small, narrow, empty glass or cup that he can hold easily by himself and pretend to drink from. When he does it fairly well, put a few drops of milk in the cup. Increase the amount as he gains in skill. If he takes to the idea of drinking by himself between 6 and 8 months, he will be much less likely to turn against the cup at 9 or 10 months. If he stops drinking himself for a few days, resist the temptation to offer the cups again yourself. That would only increase his resistance. Remember in the early months of cup drinking that he'll probably want only one swallow at a time. Many babies don't learn to take several gulps in succession until they are 1 to 1½ years old.

The child between 1 and 2 who is suspicious of the old cup he has always been offered may be delighted with a new cup or glass of a different shape or color. Changing to cold milk sometimes changes his mind. If the doctor thinks it's advisable, a little flavoring or coloring in the milk may help.

But the main thing is to keep him from getting the feeling that you are urging the cup on him against his wishes.

Inoculations

VACCINATION

180. Vaccination against smallpox. This is a must for all babies. It's best done sometime before your baby is a year old, when it's less apt to make him sick. Smallpox is a serious disease, and vaccination is a sure preventive. The vaccine contains the virus or germ of *cowpox,* and when the vaccination "takes," the baby is having a light case of cowpox. The wonderful thing about cowpox is that, though it is a very mild disease itself, it protects a person from getting the severe disease smallpox.

Once in a while there's a baby who shouldn't be vaccinated during his first year. If he has eczema, vaccination should be postponed until his eczema has cleared up (unless there are cases of smallpox in the community). Babies with eczema sometimes get severe reactions from vaccination. Vaccination should also be postponed if a baby has been frail or sickly. It's wise not to vaccinate during a very hot spell, or when other members of the family have fresh colds, or when the baby has a cold or any other upset himself. To be absolutely safe, a child should be revaccinated every 7 years. When cases of smallpox appear in a neighborhood, everybody should be immediately revaccinated.

The doctor puts a drop of the vaccine material on the baby's skin, and then pricks or scratches the skin through the drop. Nothing happens right away. In about 3 days a little red pimple appears, which soon gets a whitish blister on it. It gradually enlarges and is surrounded by a reddened area. It's at its worst on about the eighth or ninth day. In a mild vaccination the whole thing may be no larger than a nickel. In a severe reaction the

redness and swelling may cover an area larger than a silver dollar. When the vaccination is mild, a baby may show no ill effects at all. If it is severe, he will feel sick and cranky, lose his appetite, and run a fever. Don't have your baby vaccinated when you are going to be traveling or unusually busy a week later.

After the height of the reaction, the vaccination dries up and turns into a tough, brown scab, which takes several weeks to fall off.

The air should not be shut out from a vaccination. A celluloid shield should never be used. It is best of all to leave the vaccination uncovered, except by the clothing, as long as the baby does not scratch at it. If it is on his upper arm and he is scratching it, you can pin a square, sterile gauze dressing on the inside of his nightie or shirt, so that it will lie over the vaccination. If a girl is vaccinated on the thigh (to avoid the arm scar) and there is no clothing to protect it from scratching, you can place a square, sterile gauze dressing over the vaccination, and attach it with two narrow strips of adhesive plaster running up and down the thigh. Don't run adhesive plaster around the leg or arm. It may cut off the circulation.

You don't need to do anything about the vaccination for the first 3 or 4 days. After the blister or white top appears, the baby is usually kept out of the tub bath, because it's better to keep the top from being softened and broken, if possible. Give him a sponge bath from the time the blister appears until the scab falls off.

Even though severe reactions to vaccinations are uncommon and rarely lead to complications, you should keep in touch with your doctor if your baby's arm is widely inflamed, or the fever is high, or the reaction lasts after the tenth day.

If a vaccination doesn't "take," it doesn't mean that the person is immune. It only shows that the vaccine material was weak or that it didn't get through the skin. He should be vaccinated again and again, if necessary, until there is a take.

When a person who had a successful vaccination years before is vaccinated again, he should show some reaction on his skin. If most of his former protection has worn off, his new vaccination will develop much like the previous one. If he still has most

of his old protection, a small pimple will form, last a few days, and go away without ever coming to a head. If nothing shows at all, it only means that the vaccine material was weak or did not get through the skin. It should be repeated.

INOCULATIONS

181. Whooping-cough vaccine. Injections to protect a baby from whooping cough are often given by the age of 6 months. Scientists haven't completely decided yet how much protection a child gets from them. Some children catch the disease even though they have had the shots, but they are apt to have a mild case. Whooping cough is a dangerous disease for babies up to the age of 2. That's why doctors often recommend the shots, even though they know that they give only partial protection. They may be combined with diphtheria shots.

The injections are usually given 3 times, a week or more apart. Many babies begin to feel a little cranky 3 or 4 hours afterwards, and some feel quite miserable and run a fever. The reaction is usually over in 24 hours. If your baby should be sick for longer than that, you should consult the doctor, because he may have come down with something else. The injections themselves don't cause symptoms of cold or cough. A baby may have a reaction to the first shot and not to the second, or vice versa. There's no way of foretelling. The doctor may give you a prescription for a medicine to make your baby more comfortable in case the injection bothers him. Usually a doctor doesn't give a whooping-cough injection if a baby has signs of a cold or any other infection.

The usual whooping-cough vaccine is made from killed whooping-cough bacteria. It's believed that it takes the body several months to build up resistance after the injection. So there's not much use giving them *after* a child has been exposed, to protect him from that exposure.

182. Diphtheria inoculations. Diphtheria is a serious throat infection which can be prevented by inoculations in infancy. Every baby, without exception, should be protected. The shots are given by 9 months of age. It is not safe to wait after 9 months, because the disease is particularly serious in young children.

The material which is most often used nowadays is called diphtheria toxoid. This substance, made from diphtheria germs, is treated chemically so that it is not harmful. When it is injected, it stimulates the body to build up resistance against the poison of diphtheria germs.

Two or three injections are given, one or more months apart. They rarely make a baby feel sick in any way. (They sometimes give an older child a sore arm.) Six months after the last shot the baby can have a *Schick test,* to make sure that the shots have worked. The Schick test is a tiny injection into the skin of the forearm. If the baby is now safe from diphtheria, there will be no redness, 4 days later. If the baby is not yet protected a mahogany-red spot will develop. This begins to show about 2 days after the test was made and is strongest at 4 days. It's usually about the size of a nickel, but oval in shape. It fades gradually, leaving a brown stain for days. This is called a positive Schick test and shows that the baby needs more injections of toxoid. There is another possible result of the Schick test, and that is a "false positive." This is a pink spot which appears a day after the test was made and is gone by the third day. This "false positive" doesn't mean anything.

We used to think that if a child was once protected against diphtheria by inoculations, and had a negative Schick test, he would stay protected the rest of his life. But we now know that a number of children gradually lose their protection in a few years' time. Therefore it is wise to give another supplemental or "booster" shot one to three years after the first inoculations, and again when the child starts school. This keeps boosting his protection up to a safe level again. Another method is to repeat the Schick test by the age of 4, and before starting school, to make sure it is still negative. It is also wise to repeat the Schick test or give another booster inoculation, if this has not been done within a year, when there are cases of diphtheria in the neighborhood.

183. **Tetanus inoculations, of two kinds.** Tetanus, or lockjaw, is a serious infection which sometimes follows a cut or wound. The germs occur most commonly in soil and other places where horses, cows, or manure have been. The germs can still be found fairly regularly in city streets. A wound is

also more likely to be infected with tetanus if it is deep. A deep puncture from a nail, in a barnyard, is therefore the kind that is most risky. Lots of people think that the rust itself on a nail brings a danger of tetanus. This is not true. The important thing is where the nail or other object has been.

For many years we have had *antitetanus horse serum* (tetanus antitoxin) to give to people who have received serious wounds. It is often hard to decide whether a child should have horse serum when a wound is not very deep and when there is a question whether any tetanus germs could have gotten in. It's a matter that has to be decided each time between the parents and the doctor. For instance, you don't usually give serum for cuts and scratches that a child receives indoors. The trouble with giving antitetanus horse serum wholesale, for every wound, is that the serum often causes serum sickness, an uncomfortable condition with fever and hives. A worse disadvantage is that a person may become sensitive to the horse serum after one shot, so that it is difficult to give it to him another time when he may need it more.

We have been talking so far about the use of serum which is obtained from the blood of horses which have been protected against tetanus. It is given to a person *after* he has received a dangerous wound and it protects him for only a few weeks.

But in recent years we have had a new kind of inoculation called *tetanus toxoid* which is similar to diphtheria toxoid. It is material from tetanus germs which has been rendered harmless chemically. When it is injected, it encourages the body to *slowly* build up its own protection against tetanus. The protection lasts a long time (in contrast to horse serum). The new tetanus toxoid has been used by the armed forces in the second World War and has been shown to work very well. It is being used more and more as a preventive for children. You should discuss with your own doctor whether he recommends routine tetanus protection for your child. He will take local conditions into account in deciding. It seems wise to give it to all children who spend all or part of their time on farms.

Tetanus toxoid can be given alone at any age, or it can be combined in the same inoculation with diphtheria toxoid, which is given in infancy. The baby at this age will probably

not be made sick by the shots. The combined inoculations are given 2 or 3 times, one or more months apart.

The child's own protection, that is built up by tetanus toxoid, develops only slowly and reaches a safe height only after the second shot. Therefore, there is no use *starting* this method at the time a child gets a dangerous wound. He needs a shot of horse serum to give him immediate protection.

The protection from tetanus toxoid lasts a long time, but not forever. A "booster" shot is given a year after the original injections. In addition, if the child gets a dangerous cut at any time, he should have another toxoid injection. This will boost his protection immediately to a good, high level.

184. **Other inoculations.** There are inoculations against *scarlet fever,* but it is not certain just how much value they have, and they are not often recommended as a routine thing by doctors. *Typhoid* vaccinations are given when a person is going to be traveling or living in a region where the water supply and other sanitary conditions are unreliable. They are not given to babies and children otherwise.

Toilet Training

BOWEL TRAINING

185. **What is "toilet training"?** Sometimes parents make a great fuss about toilet training, work very hard at it, and end up with a balky, untrained child. Many people have the idea that the only way that a baby becomes trained is by the parents' strenuous efforts. This is the wrong way to look at it. Generally speaking, babies themselves gradually gain control of their own bowels and bladders as they grow. The most that parents can do is guide them a little. If a mother will realize that the baby will mostly "train" himself, and if she will study him to see what stage he is in, and how he feels about the toilet, she is not going to have much trouble with training.

186. Is early bowel training harmful? It has been the style, lately, to try to "train" the baby to move his bowels on the potty at a *very* early age. It can sometimes be done with the baby who always has his movement at just the same time of day. This isn't exactly training, because the baby really doesn't know what he is doing. It's the mother who's trained. Many times the baby rebels against these efforts when he is old enough to realize what is happening to him. Some psychologists think that early training is harmful, in certain cases at least, whether the baby rebels later or not. It seems sensible to give the baby the benefit of the doubt, and leave him in peace until he is old enough to know a little of what it's all about. I would wait until he can at least sit up steadily alone, which will be around 7 to 9 months.

187. The important thing is the attitude during the second year. Whether you start bowel training early or late, the most important thing is how you go about it during the *second* year. When a baby is 1 to 1½ years old, he begins to be interested in his own bowel function, and to gain more control. He can hold back on the movement at one time and push with a will at another. He's also getting more independent. He comes to realize that the movement is his own. He feels kind of proud of it. If his mother is sympathetic, he may go into the next room to fetch her so that she can admire it, too. Sometimes he wants to play with it.

188. Why babies often rebel in the second year. If a mother is demanding in her training efforts, she goes right against her baby's grain at this age. If she insists that he move his bowels in a certain place at a certain time, she is saying to him in so many words, "It's not your movement, it's mine. You do it in the place that I choose, when I tell you to." Instead of appreciating the thing he is proud of, she may show him that she dislikes it. She empties the potty or flushes the toilet as fast as she can, maybe with a look of disgust. It is no wonder that the baby, who's at a balky age anyway, is apt to rebel.

Many a baby shows his resistance in a polite way. He sits down obediently but never has a movement as long as he stays there. But right after getting up, he moves his bowels in the corner or in his pants. He almost seems to be saying, "This

movement is mine, and I want to do it my own way." This kind of resistance is very common indeed, and it occurs, for a short period, in lots of babies, even those whose mothers have been pretty polite and reasonable about training. It's perfectly natural. A mother will say, "He was very well trained for several months, but now he suddenly seems to have forgotten what it's all about." I don't think babies forget that easily; they just get wiser and more independent.

189. Fighting against the toilet and holding back. There are two other less common kinds of rebellion. One baby gets to hate the potty chair or the toilet seat, and fights and cries when his mother tries to bring him there. This is most apt to happen when he has previously had painfully hard movements. You can see why, if he has been hurt on the toilet, he balks at taking another chance there. He prefers to dodge the issue and let his movement come out gradually when he's not thinking about it. When his mother insists, it's as if she were saying, "Come now, it's time to hurt yourself." No wonder he fights. This shows the importance of trying to overcome a tendency to hard movements promptly, especially during the 2nd year.

The third kind of resistance is when the baby holds his movement in, not just when he's on the seat, but afterwards, too. He gets to be constipated for psychological reasons. This holding back can develop just because the mother is showing too much persistence in going at his training, but it's more apt to follow painfully hard movements. The child just doesn't dare let it come out at any time. This causes a vicious circle, because the longer the movement stays in the harder it gets.

190. Suppositories and enemas are risky when the baby is resisting training. If a baby is refusing, during his second year, to move his bowels in the right place, or holding back, it may occur to his mother to give him a suppository or an enema. This is bad, for he usually fights against these measures, not just in anger, but in terror, too. He acts as fearful as though his mother were trying to remove his arm by force. And if he's afraid his movement will hurt, he will expect the enema or suppository to hurt, too. It's much wiser to soften up a hard movement, which the baby is holding back, with medicine given by mouth.

191. The bad effects of a fight over bowel training. When a baby gets into a real battle with his mother, it is not just the training which suffers, but also his personality. First of all, he becomes too obstinate, gets in a mood to say "no" to everything, whether he means it or not. (We all know grownups who are still automatically saying "no" to every request.) He becomes too hostile and "fighty." Of course, every baby is angry at his mother at certain moments, and that is natural. It's bad when the antagonism is chronic.

Then there's overguiltiness. The little child knows in his bones that he's dependent on his mother's love and approval. When he antagonizes her it makes him feel uneasy and guilty underneath, especially at this early, impressionable age. If his mother is trying to make him feel naughty about soiling himself with the movement, he may come to dread *all* kinds of dirtiness. When he gets a speck of earth on his hands, he runs crying to her, begging to be cleaned up. If this worrisomeness is deeply implanted at an early age, it's apt to turn him into a fussy, finicky person—the kind who's afraid to enjoy himself or try anything new, the kind who is unhappy unless everything is "just so."

192. Suggestions for sensible training. I think that the best method of all is to leave bowel training almost entirely up to your baby. Somewhere in the latter half of the second year, he will be aware of when his movement is coming and be able to control it. He will probably make some sound of readiness, and you can then lead him to the proper place. If he doesn't signal, he will probably take himself to the toilet before he is 2, just because he gets the idea from watching others in the household.

A baby's toilet seat with arms, that sets on the floor over a potty, is a little better than the kind that sets over the regular toilet. The baby feels more safe and pleased with his own chair, down at his own level, and he won't ever be frightened by the flushing. A plain potty alone is too tippy, and it's not very comfortable, especially in cold weather.

Some mothers don't want to wait until a baby practically insists on going to the bathroom himself. I don't think there is harm in a mother lending a hand earlier, *if* she does it tactfully,

takes the baby's readiness into account, and doesn't make an issue of it.

I would at least wait to begin until a baby is able to sit up steadily by himself (7-9 months), *and* until you have some way of knowing when he's going to perform. There are two possibilities. One is when a baby is naturally regular and always has his movement, for instance, within 10 minutes after breakfast. He's put on once a day, and it's all done speedily before there's any chance for an issue. The other possibility is a baby who is irregular but makes some kind of noise or expression when he is starting, so that the mother can put him on in time.



Be friendly and easygoing about the bathroom.

If a baby is not regular, and shows no sign when he moves, I think a mother should not try to catch his movement yet. She could only do it by putting him on too often, keeping him there too long, and running the risk of making him rebellious. I think

it's risky to use a suppository to try to give the baby the idea. There's too little chance of establishing a habit in a few days, too much danger of implanting a wrong attitude by using a suppository for more than a few days.

For several months don't expect to catch more than the first movement of the day. If there's a second, it's much less regular. Wait to catch it until he has the idea better.

Even if your baby's movement has been well caught from the age of 8 months to 15 months, don't be surprised if he then suddenly ceases to perform in the right place. He hasn't forgotten or turned bad, he's just reached a new stage of independence. An attack of diarrhoea or a trip may have thrown him off his old schedule and habit. Shrug your shoulders and let him move them his own way for weeks, or even months if necessary, until he feels more co-operative. All you can work with is his willingness; you can never really beat him in a battle. Wait until he is settled down again, and willing and predictable enough to do his part.

If he runs into a spell of hard movements, get in touch with the doctor promptly about overcoming this, before they have a chance to become painfully hard. With some children, serving prunes once or twice a day will do the trick. A few will need some medical preparation for a period of days or weeks. Try to *prevent* hardness in the child who has a tendency that way, rather than treat it after it happens, especially between 1 and 2. (See Section 107 on Constipation.)

Throughout your training efforts be casual, friendly. Never make an issue of the toilet or shame the baby when he fails or has an accident. Don't keep him on the seat for more than 10 minutes, let him off sooner if he becomes restless. Don't give him a feeling of disgust about soiling or about the movement itself. If you find him playing in it, just clean him up, don't act disapproving. He's being completely natural. If he always soils in bed when you aren't around, and regularly plays with it, the best you can do is pin up his diapers snugly and perhaps use waterproof pants.

Remember that a child will completely train himself sooner or later if no struggle has taken place. *Practically all the children who regularly go on soiling after 2 are those whose moth-*

ers have made a big issue about it and those who have become frightened by painful movements.

A child between 2 and 4 years sometimes reverts to deliberate soiling when he feels resentful or unhappy, for instance if he is jealous of a new baby sister. Don't make a fuss about this, but figure out what made him feel that way and try to correct it.

193. **Fear of the flushing.** Occasionally, a baby in the neighborhood of 2 becomes frightened by the flushing of the toilet and refuses to sit down, even though he previously was fascinated by it. Apparently he suddenly gets the idea, "Suppose I fell in and was flushed away in that rush of water, like my movement." Never force him to sit there if he is frightened. Use a baby's toilet seat on the floor over a potty. If his seat isn't built to be used that way, it can be converted by nailing two boards upright to the underside of the seat so that it is held up off the floor, with room for the potty underneath. Let him take months, if necessary, to develop wisdom and courage enough to be willing to try the regular toilet again.

URINE TRAINING

194. **Go at it easily, when he's ready.** It really isn't you who trains your child's bladder. The most you can do is show the baby where you want him to urinate. The worst you can do is to go at his training so hard that you get him to hate the idea of going to the bathroom.

A child will usually become dry in the daytime somewhere between 1½ and 2½ years, even if you don't do anything about it. His bladder holds on longer and longer, he becomes more aware of what's happening, acquires more control over holding on and letting go, eventually wants to perform like others in the household. This is probably the best method.

If you want to try to get your baby dry sooner, you should be very tactful, and consider his readiness.

I'd wait to start any urine training at least until the baby's bladder begins to hold on for a *couple of hours* at a time. If you put him on only when he's been dry for 2 hours, you will be sure of three things.

1. The bladder is grown-up enough to co-operate. You won't

be trying to train something that is nowhere near ready for training.

2. The baby's bladder will be full after 2 hours. That means he is all ready to do something pretty soon. You won't have to keep him on the toilet seat long.

3. If you wait to put him on until he has been dry for 2 hours, you won't be going at his training too suddenly, because you will find him dry only every few days at first. Gradually, as the weeks pass, you will find him dry more regularly. (This is a practical time to change to "training pants.")

The wrong way to go at urine training is to decide some morning that you are going to teach your child to stay dry, and to begin abruptly sitting him on the toilet every hour of the day, keeping him there each time until he does something. You would be taking no account of his readiness. You would be going at him too suddenly and too hard, and you would be imprisoning him on the toilet so much of the day that you'd almost compel him to rebel.

When does a baby begin to stay dry for as long as 2 hours at a time? For most babies this doesn't happen until they are about 15 months old, but some are slower and some are earlier than this. Once in a while you see a baby, usually a girl, whose bladder learns to hold urine for several hours as early at 10 months. And occasionally you find a child, usually a boy, whose bladder is still emptying every 20 minutes or so when he's nearly 2 years old. Boys, on the average, are slower than girls to become dry. Very often earliness or lateness is a trait that runs through several members of the same family. The child with a placid disposition is more apt to be early and the restless, energetic child is more apt to be late.

Now a child isn't really "trained" when you are catching him dry every 2 hours. He's not taking any responsibility yet, it's just that his bladder has learned to wait and that you've trained yourself to catch him. Of course, he *is* getting the idea of voiding just as soon as he gets on the toilet. But it will be months before he begins to get a sense of responsibility and to notify his mother that he needs to go. In many babies the first sign of this is when they solemnly tell the mother *after* they have wet their pants. This may make a suspicious mother think that her baby

is teasing or thwarting her. But this isn't true. The baby is really beginning to feel that he ought to be on the toilet when he urinates. The trouble is that he doesn't receive much warning and he hasn't much control yet.

Eventually he has enough control and is sensitive enough to the feeling of fullness, so that he will pretty regularly tell his mother in time. This usually begins to come around 2. But plenty of children will go on having accidents occasionally, especially when they're excited, when they're all absorbed in some fascinating occupation, or when they are out in public. Don't shame them for this. In nursery schools they find it necessary to take most 2-year-olds to the bathroom at regular intervals.

Sometimes there are "accidents on purpose" in a child between 2 and 4, when he feels resentful. Better take these as a joke and concentrate on getting along well with him. He can always beat you if you make a battle of it.

It sometimes happens that a child around 2 has become so well trained to his own potty chair or toilet seat that he can't perform anywhere else. You can't urge him or scold him into it. He will probably wet his pants, eventually, for which he shouldn't be scolded. If he is painfully full, can't let go, and you can't get home, put him in a hot bath for half an hour. This will probably work. Keep this possibility in mind when you take him traveling, and bring along his own seat if necessary. It's better to get a child used early to urinating in different places, including outdoors.

Parents sometimes are worried because a boy around 2 won't make the change to urinating standing up. Don't make an issue of this. He'll get the idea sooner or later, if he has a chance to see his father and other boys.

195. Staying dry at night. Staying dry at night is another thing that the bladder learns itself. I say this at the start, because so many people have the mistaken idea that picking the baby up during the night is what teaches him. It's true, of course, that you will secure a dry bed a little earlier in the baby's life if you break the long night's rest at 10 P.M. But you'd never catch him dry, even at 10 P.M., if his bladder weren't making progress, all by itself. Every once in a while you find a baby

who stays completely dry all night by the age of 12 months, without the mother's ever having put him on the toilet, even in the daytime. In other words, the bladder sometimes "trains" itself before anybody has had a chance to train it.

A baby may, at certain ages, hate to be waked up in the evening, and scream and struggle. Then there's no point doing it. You probably can't make him urinate anyway. Even if you could, the advantage of getting him dry a little earlier wouldn't be worth the struggle. The danger of starting a battle is that it may set the child against the toilet, and even delay the age at which he would have become dry by himself. Another kind of baby who is best left alone at night is the one who stays awake for an hour or two after he's roused.

At what age would you start picking a baby up if he's cooperative about it? It's, of course, not a matter of age, but how his bladder is functioning. There usually isn't much use before he is being pretty responsible about keeping himself dry in the daytime. This won't come much before the end of the second year for most babies. If you don't find him dry at ten o'clock or so, forget about the whole thing for a couple of months. If you find him dry at ten, but always wet in the morning, you can either go on picking him up, or you can let it go for a while. About all you're accomplishing is keeping him dry for a certain number of hours during the night and having his bed a little less wet in the morning. This may be worth while in the case of a baby who gets uncovered and catches cold easily, or who has trouble with diaper rash. But remember that you aren't teaching your baby anything by picking him up, as long as his bladder isn't able to hold on.

The age when you can expect babies to be able to stay dry through the night varies a great deal. A few are ready before a year and a half. Most are ready somewhere between 2 and 3. A fair number, especially boys, aren't ready before 4. Boys tend to be later than girls, high-strung children later than relaxed ones. Sometimes slowness in becoming dry seems to be a family trait. Disturbances in urine control are discussed in Sections 432 to 436.

The One-Year-Old

WHAT MAKES HIM TICK

196. Feeling his oats. One year old is an exciting age. Your baby will be changing in lots of ways—in his eating, in how he gets around, in what he wants to do, and in how he feels about himself and other people. When he was little and helpless, you could put him where you wanted him, give him the playthings you thought suitable, feed him the foods you knew were best. Most of the time he was willing to let you be the boss, and took it all in good spirit. It's more complicated when he is around a year old. He seems to realize that he's not meant to be a baby doll the rest of his life, but a human being with ideas and a will of his own.

When you suggest something that doesn't appeal to him, he feels he *must* assert himself. His nature tells him to. He just says "no" in words or actions, even about things that he likes to do. The psychologists call it "negativism"; mothers call it "that terrible *no* stage." But stop and think what would happen to him if he never felt like saying "no." He'd become a robot, a mechanical man. You wouldn't be able to resist the temptation to boss him all the time, and he'd stop learning and developing. When he was old enough to go out into the world, to school and later to work, everybody else would take advantage of him, too. He'd never be good for anything.

197. The passion to explore. He's a demon explorer. He pokes into every nook and cranny, fingers the carving in the furniture, shakes a table or anything else that isn't nailed down, wants to take every single book out of the bookcase, climbs onto anything he can reach, fits little things into big things and then tries to fit big things into little things. A tired-out mother calls this "getting into everything," and her tone of voice says that he's a nuisance. She doesn't really mean it, but she probably doesn't realize what a vital period this is for him. A baby *has* to

find out about the size and shape and movableness of everything in his world and test out his own skill before he can advance to the next stage, just the way he'll have to go through the grades before he can go to high school. That he "gets into everything" is a sign that he's bright in mind and spirit.

Incidentally, you've probably realized by now that he is never quiet while he's awake. It isn't nervousness—it's eagerness. He's made that way so that he will surely keep learning and practicing all day long.

198. **He's very distractible, and that's a big help.** The year-old baby is so eager to find out about the whole world that he isn't particular where be begins or where he stops. Even if he's all absorbed in a ring of keys, you can make him drop it by giving him an egg beater. His distractibility is the handle by which his wise parent guides him.

INDEPENDENCE AND OUTGOINGNESS

199. **He gets more dependent and more independent at the same time.** This sounds contradictory. A mother is apt to complain of a year-old baby, "He's getting to cry every time I go out of the room." This doesn't mean that he is developing a bad habit, but that he's growing up and realizing how much he loves company, especially the company of his family. It's inconvenient, but it's a good sign.

But at the very age when he is becoming more dependent, he is also developing the urge to be on his own, discover new places, make up to unfamiliar people.

Watch a baby at the creeping stage whose mother is washing the dishes. He plays contendedly with some pots and pans for a while. Then he gets a little bored and decides to explore in the dining room. He creeps around under the furniture there, picking up little pieces of dust and tasting them, carefully climbing to his feet to reach the handle of a drawer. After a while he seems to feel the need of company again, for he suddenly scrambles back into the kitchen. At one time you see his urge for independence getting the upper hand, at another the need for security. He satisfies each in turn. As the months go by, he becomes more bold and daring in his experiments and explorations. He still needs his mother, but not so often. He is

building his own independence, but part of the courage comes from knowing he can get security when he feels the need.

I am making the point that independence comes from security, as well as from freedom, because some people get it twisted around backwards. They try to "train" independence into the child by keeping him by himself in his play pen or his crib, even though he is crying for company. But I think that every minute he cries he is becoming more attached instead of less.

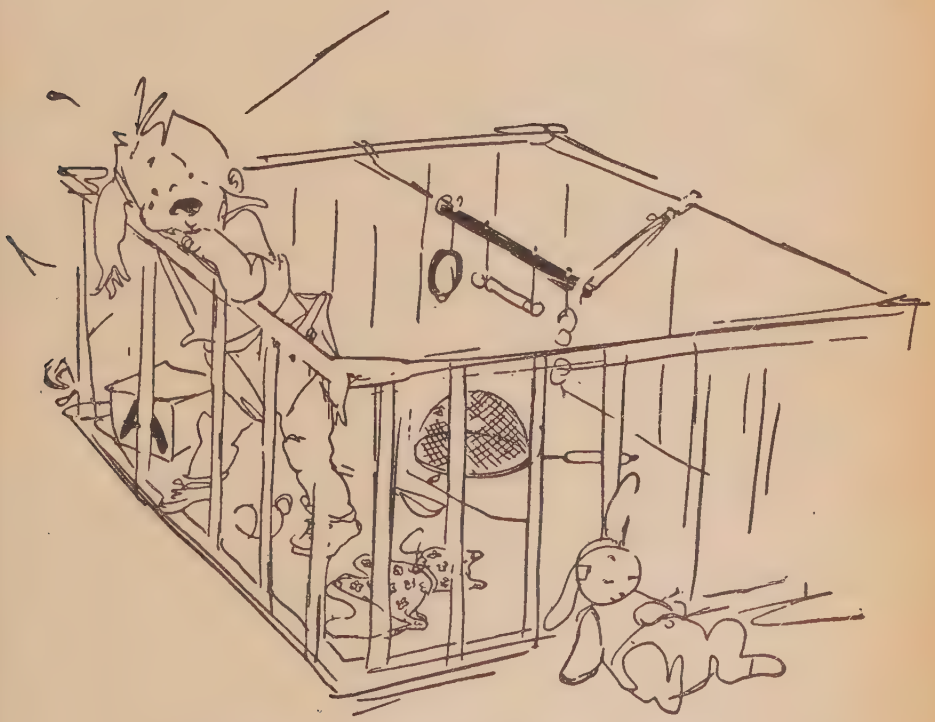
So the baby around a year is at a fork in the road. If he's given a chance, he'll gradually become more independent: more sociable with outsiders (grownups and children), more self-reliant, more outgoing. If he's confined a great deal, kept away from others, used to having only his mother hovering over him, he is apt to become tied to her apron strings, more timid with strangers, wrapped up in himself. How is independence encouraged?

200. **Let him out of the carriage when he can walk.** When a baby has learned to walk, it's time to buy him shoes with soles and let him out of his carriage on his outings. If it's cold weather, buy him snow pants too. Never mind if he gets dirty; he should. Try to go to a place where you don't have to be after him every minute and where he can get used to other children. If he picks up cigarette butts, you'll have to jump, take them away, and show him something else that's fun. If he picks up twigs, I'd take a chance and let him put them in his mouth if the place isn't too dirty. You can't let him eat handfuls of sand or earth, because it will irritate his intestines, but a couple of blades of grass won't hurt him. To keep an able-bodied walking baby tucked in his carriage may keep him out of trouble, but it will cramp his style and hinder his development.

201. **Let him out of the play pen when he insists.** One child will be willing to stay in the play pen, at least for short periods, as late as a year and a half. Another thinks it's a prison by the time he's 9 months. Most like it well enough until they learn to walk, around the age of a year and a quarter. I'd say let your baby out of the pen when he feels unhappy there. I don't mean at the first whimper, for if you give him something new to play with, he may be happy there for another hour. Outgrowing the

pen is a gradual process. At first he gets sick of it only after a long spell. Gradually he gets impatient earlier. It may be months before he objects to being put in at all. In any case, let him out each time when he's sure that he's had enough.

202. **Get him used to outsiders.** At this age a baby's nature tells him to be leery and suspicious of strangers till he has had a chance to look them over. But then he wants to get closer and eventually make friends, in a one-year-old fashion, of course. He may just stand close and gaze, or solemnly hand something to the newcomer and then take it back, or bring everything movable in the room and pile it in the person's lap.



Let him out when he's had enough.

Many adults don't have the sense to let a small child alone while he sizes them up. They rush up to him, full of talk, and he has to retreat to his mother for protection. Then it takes longer for him to work up his courage to be friendly. I think it helps for a mother to remind a visitor in the beginning, "It

makes him bashful when you pay attention to him right away. If we talk for a while, he'll try to make friends sooner."

When your baby is old enough to walk, give him plenty of chances to get used to strangers and make up to them. Take him to the grocery store a couple of times a week. Take him every day if possible where other small children play. He won't be able to play *with* them yet, but at times he'll want to watch. If he is used to playing near them now, he will be ready for co-operative play when the time comes, between 2 and 3. If he's never been around other children by 3, it will take him months just to get used to them.

HOW TO HANDLE HIM

203. Arranging the house for a wandering baby. When you tell a mother that her baby has outgrown the play pen or the crib and that she ought to let him on the floor, she is apt to look unhappy and say, "But I'm afraid he'd hurt himself. At least he'd wreck the house." Sooner or later he must be let out to roam around, if not at 10 months, at least by 15 months when he's walking. And he's not going to be any more reasonable or easier to control then. At whatever age you give him the freedom of the house, you have to make adjustments, so it's better to do it when he is ready.

How do you keep a year-old baby from hurting himself or the household furnishings, anyway? First of all, you can arrange the rooms where he'll be so that he's allowed to play with three quarters of the things he can reach. Then only a quarter have to be forbidden. Whereas, if you try to forbid him to touch three quarters of the things, you will drive him and yourself mad. If there are plenty of things he can do, he's not going to bother so much about the things he can't do. Practically speaking, this means taking breakable ash trays and vases and ornaments off low tables and shelves and putting them out of reach. It means taking the valuable books off the lower shelves of the bookcases and putting the old magazines there instead. Jam the good books in tight so that he can't pull them out. In the kitchen put the pots and pans on the shelves near the floor and put the china and packages of food out of reach.

204. Avoiding accidents. Parents cannot prevent all acci-

dents. If they were careful enough or worrisome enough to try, they would only make a child timid and dependent.

On the other hand, a great majority of serious accidents can be easily prevented if you know where the common dangers lie and are sensible in avoiding them. Here is the list.

Low chairs are safer than high chairs. If you use a high chair it should have a broad base so that it won't tip, a harness to hold a climbing baby, a latch to keep him from raising the tray. A baby carriage should have a harness for a baby who has reached the climbing age. There should be gates at the top and sometimes at the bottom of stairs, including porch stairs, until the child can go up and down steadily. Upstairs windows should have guards, or be opened only at the top.

It is not wise to let a baby be crawling or a small child be walking around the kitchen during the cooking or serving of meals. There is danger from spattering grease, from the mother's tripping and spilling something hot, from the child's pulling a pot off the stove. This is the best time for the play pen or a pen made by laying chairs on their sides, or for him to be in his chair. His chair or pen should be well away from the stove. A baby can reach a surprising distance when he tries. Get in the habit of turning pot handles away from the front of the stove. When serving the meal, put a coffee pot or other hot container in the middle of the table, and avoid tablecloths that hang over the edge and so can be pulled off. Take the same precautions for oil lamps.

A baby or small child who still puts things in his mouth should not have small objects like buttons, beans, peas, or beads to play with, or nuts or popcorn to eat, because they are easily breathed into the windpipe and cause choking. Take away a pencil or other sharp object if a small child keeps it in his mouth when he plays or runs.

As a matter of habit, always feel the temperature of a bath just before you put a child in, even if you remember doing it earlier. Hot faucets sometimes cause burns. Don't touch, or let a child touch, electrical equipment while in a bath or while holding onto a faucet. Don't leave pails of hot water on the floor.

Electric cords should be in first-class condition. Train the baby early not to pull or chew them (Section 206). Cover un-

used wall sockets with adhesive tape or put solid furniture in front of them, so that pins can't be poked into them. Put bulbs into empty lamp sockets if they are within reach.

Keep matches in containers in high places that are impossible for even a determined 3- or 4-year-old to reach.

Wells, garden pools, cisterns, should be well protected.

Put broken glass, opened cans, into a covered, hard-to-open receptacle. Use a can with a slot in the top for used razor blades.

Don't let a baby go close to strange dogs at an age when he is likely to startle or hurt them.

Now's the time to put poisons out of reach. A fifth of all accidental poisonings occur in the second year of life. Children in this exploring and tasting age will, when the spirit moves them, eat almost anything, no matter how it tastes. They especially love pills, good-tasting medicines, cigarettes, and matches. You will be surprised to read the list of the substances that most frequently cause dangerous poisoning in children.

Cathartic pills that contain strychnine
Tonic pills that contain strychnine
Kerosene, gasoline, bezene
Oil of wintergreen
Lye
Insect and rat poisons
Acids
Nicotine in tobacco and plant sprays

Now is the time to inspect your home with an eagle eye—or, rather, a baby's eye. Put all medicines surely out of reach. Find very safe places for lye, drain cleaners, ammonia, cleaning powders, cleaning fluids, shoe polish, ink, cigarettes, tobacco, plant sprays. Keep dangerous substances in different cupboards or on shelves far away from relatively harmless medicines and substances used in cooking, so that you won't grab the wrong one in a hurry. Never give a child a bottle or package of medicine or other poisonous substance to play with, no matter how tightly stoppered. Put bold labels on all medicines, so that you won't use the wrong one. Stop using rat poisons and insect pastes and powders. Get rid of them.

205. **Protect him from frightening sounds and sights.** A baby at a year may become fascinated with one thing for several weeks on end—for instance, the telephone, or planes over-

head, or electric lights. Let him touch and become familiar with objects that are not dangerous or disturbing. However, in some cases the child is half frightened of the object. Then it's wiser for the parents not to play up to his interest, or, if it's something dangerous, not to dwell on the danger. Better to distract him to something else than to increase his awe.

At this age a baby may be frightened by strange objects that move suddenly or make a loud noise, such as folded pictures that pop up from a book, the opening of an umbrella, a vacuum cleaner, a siren, a barking, jumping dog, a train, even a vase of rustling branches.

Try to keep these startling events from happening too close to a one-year-old, until he gets used to them. If the vacuum cleaner bothers him, don't use it for a few months, at least while he is indoors. Then try it the first time when he is some distance away.

Fear of strangers is discussed in Sections 140 and 202, fear of the flushing toilet in Section 193, fear of the bathtub in Section 77.

206. **How do you make him leave certain things alone?** This is the main problem between 1 and 2 years. There will always be a few things which you have to teach him to let alone. There have to be lamps on tables. He mustn't pull them off by their cords or push tables over. He mustn't touch the hot stove, or turn on the gas, or crawl out a window.

You can't stop him by saying no, at least not in the beginning. Even later it depends on your tone of voice and how often you say it. It's not a method to rely on heavily. Don't say "no" in a challenging voice from across the room. This gives him a choice. He says to himself, "Shall I be a mouse and do as she says, or shall I be a man and grab the lamp cord?" Remember that his nature is egging him on to try things and to balk at directions. The chances are he'll keep on approaching the lamp cord with an eye on you to see how angry you get. It's much wiser, the first few times he goes for the lamp, to go over promptly and whisk him to another part of the room. Quickly give him a magazine, an empty cigarette box, anything that is safe and interesting. There's no use tossing him a rattle that he was bored with months ago.

Suppose he goes back to the lamp a few minutes later? Remove him and distract him again, promptly, definitely, cheerfully. It's all right to say "no, no," at the same time that you remove him, adding it to your action, for good measure. Sit down with him for a minute to show him what he can do with the new



Better to remove and distract him than to say, "No, no!"

plaything. If necessary, put the lamp out of reach this time, or even take him out of the room. You are tactfully showing him that you are absolutely sure in your own mind that the lamp is not the thing to play with. You are keeping away from choices, arguments, cross looks, scoldings—which won't do any good but will only get his back up.

You might say, "But he won't learn unless I teach him it's naughty." Oh yes he will. In fact, he can accept the lesson more easily if it's done in this matter-of-fact way. When you waggle a finger at a child from across the room with a disapproving expression and say, "No-o-o," you make it hard for him to give in. And it's no better if you grab him, hold him face to face, and give him a talking-to. You're not giving him a chance to give in gracefully or forget. His only choice is to surrender meekly or to defy you.

I think of a Mrs. T., who complained bitterly that her 16-month-old daughter was "naughty." Just then Suzy toddled into the room, a nice girl with a normal amount of spunk. Instantly Mrs. T. looked disapproving and said, "*Now remember,* don't go near the radio." Suzy hadn't been thinking of the radio at all, but now she had to. She turned and moved slowly toward it. Mrs. T. gets panicky just as soon as each of her children in turn shows signs of developing into an independent person. She dreads that she won't be able to control them. In her uneasiness she makes an issue when there doesn't need to be any. It's like the person learning to ride a bicycle who sees a rock in the road ahead. He is so nervous about it that he keeps steering right into it.

Take the example next of a baby who is getting close to a hot stove. A mother doesn't sit still and say, "No-o-o," in a disapproving voice. She jumps and gets him out of the way. This is the method that comes naturally if she is really trying to keep him from doing something, and not engaging in a battle of wills.

A mother of a 1¾-year-old boy takes him with her every day to the grocery store. But she complains that, instead of walking right along, he wanders up the walk and climbs the front steps of every house they pass on the way. The more she calls to him the more he lingers. When she scolds him, he runs in the opposite direction. She is afraid he is turning into a behavior problem. This baby isn't a behavior problem, though he may be made into one. He's not at an age when he can keep the grocery store in mind. His nature says to him, "Look at that walk to explore! Look at those stairs!" Every time his mother calls to him, it reminds him of his new-felt urge to assert himself. What can the mother do? If she has to get to the store promptly, she can

take him in his carriage. But if she's going to use this time for his outing, she should allow four times as long as if she were going alone, and let him make his side trips. If she keeps moving slowly, he'll want to catch up to her every once in a while.

Here's another tight spot. It's time to go in for lunch, but your small child is digging happily in the dirt. If you say, "Now it's time to go in," in a tone of voice that means, "Now you can't have any more fun," you'll get resistance. But if you say cheerfully, "Let's go climb the stairs," it may give him a desire to go. But suppose he's tired and cranky that day, and nothing that's indoors makes any appeal. He just gets balky right away, disagreeably balky. I'd pick him up casually and carry him indoors, even if he's squealing and kicking like a little pig. You do this in a self-confident way, as if you were saying to him, "I know, you're tired and cross. But when we have to go in, we have to." Don't scold him; it won't make him see the error of his ways. Don't argue with him, because that won't change his mind; you will only get yourself frustrated. A small child who is feeling miserable and making a scene is comforted underneath by sensing that his mother knows what to do without getting angry.

207. **Dropping and throwing things.** Around the age of one year, a baby learns to drop things on purpose. He solemnly leans over the side of his high chair, and drops food on the floor, or tosses his toys, one after the other, out of his crib. Then he cries because he hasn't got them. An irritated mother is apt to think he's deliberately making a monkey out of her. But he isn't thinking of her; he is fascinated by a new skill. He wants to do it all day long, the way a boy wants to ride his new two-wheeler. If you pick up the object, he realizes it's a game that two can play and is more delighted. You can play it as a game if you are willing, or you can fix things so that he can play it by himself. Tie his favorite bed toys to the top railing of his crib on strings so that they will only drop to the level of the mattress. Tie others to his carriage. You won't want him throwing food out of the high chair in any case, but he won't start until his appetite is pretty well satisfied. Take the food away casually when the dropping begins and put him down to play. Trying to scold a baby out of dropping things leads to nothing but the frustration of the mother.

208. **Naps are changing.** Naptimes are shifting in most babies around the age of a year. One who was taking a nap about 9 A.M. may refuse it altogether, or show that he wants it later and later in the morning. If he takes it late, he will be unready for his next nap until the middle of the afternoon, and this will



Dropping is a new skill.

probably throw off his bedtime after supper. Or he may refuse the afternoon nap altogether. A baby may vary a lot from day to day at this period, and even go back to a 9 A.M. nap that he has refused for 2 weeks, so don't come to final conclusions too soon. You have to put up with these inconveniences as best you

can, realizing that they are temporary. With some babies who are not ready to sleep in the first part of the morning, you can remove the need for the before-lunch nap by putting them in their beds anyway, around nine in the morning, if they are willing to lie or sit quietly for a while. Of course, another kind of baby would only get in a rage if put to bed when not sleepy, and nothing would be accomplished.

If a baby becomes sleepy *just* before noon, the mother's cue is to move lunch up to 11:30, or even 11 for a few days. Then the long nap comes after lunch. But for a while after a baby has cut down to one nap a day, whether morning or afternoon, he may get frantically tired before suppertime. As a doctor friend of mine put it, "There's a stage in a baby's life when two naps are too many and one is not enough." You can help your baby through this period by giving him his supper and putting him to bed for the night a little earlier for the time being.

Don't get the idea from this section that all babies give up their morning nap in the same way or at the same age. One is through with it at 9 months, another craves it and benefits by it as late as 2 years old.

HE'S APT TO CHANGE HIS EATING HABITS

209. He gets more choosy for several reasons. Somewhere around a year a baby is apt to change his feeling about his food. He becomes more choosy and less hungry. This is not surprising. If he kept on eating and gaining the way he did when he was a little baby, he'd turn into a mountain. Now he seems to feel that he has time to look the meal over and ask himself, "What looks good today and what doesn't?" What a contrast this is with his behavior at 8 months! In those days he felt he was starved to death when mealtime came around. He'd whimper pathetically while his mother tied his bib and lean forward for every bite. It wouldn't matter much what she was serving him. He was too hungry to care.

There are other reasons, aside from not being so hungry, that make him choosy. He's beginning to realize that he's a separate person with ideas of his own, so he becomes definite in his dislike of a food that he was just doubtful about before. His memory is getting better, too. He probably realizes, "The meals here

are served up pretty regularly, and they stay around long enough for me to get what I want."

Teething often takes away a child's appetite, especially when the first molars are on their way. He may eat only half his usual amount for days, or occasionally refuse an entire meal. Finally, and perhaps most important, there is the fact that appetite *naturally* varies from day to day and week to week. We grownups know that one day we grab a big glass of tomato juice and another day split-pea soup looks better. It is the same way with children and babies. But the reason you don't see this variation more often in infants under a year is that they are, most of the time, too hungry to turn anything down.

210. Dr. Davis's experiments in appetite. Dr. Clara Davis wanted to find out what children would eat if left to their own desires, with a variety of wholesome foods to choose from. She didn't start with older children, for fear they would have already developed prejudices about food. So she picked three babies, 8 to 10 months old, who had never had anything to eat before but breast milk. She took them to live at a place where they could be watched carefully. And this is how they were fed. At each meal the nurse would place before them six or eight serving dishes, containing a variety of wholesome, unrefined foods. There were vegetables, fruits, eggs, cereals, meats, whole-grain bread, milk, water, and fruit juices. The nurse was told, "Don't help the baby till he shows you what he wants." The 8-month-old baby leans forward and dips his fist into a dish of beets and then tries to eat it off his hand. Now the nurse is permitted to give him a teaspoonful of beets. Then she must wait until he shows his choice again. Another spoonful of beets or maybe applesauce.

Dr. Davis discovered three important things. First: Babies who chose their own diet from a variety of natural foods developed very well; none of them got too fat or too thin. Second: Every baby, over a period of time, chose what any scientist would agree was a well-balanced diet. Third: From meal to meal and day to day, the appetite varied a lot. Each separate meal wasn't well-balanced. For several meals in a row a baby might feed largely on greens. Then he would change about and go more heavily for starches. Sometimes he would go on a real

jag and, for instance, make a whole meal of nothing but beets, perhaps four times as much beets as a grownup would consider a polite amount. And after this spree he wouldn't vomit, he wouldn't have a belly-ache or diarrhoea. A baby would sometimes drink as much as a quart of milk, in addition to his full meal, and at the next meal want very little milk at all. One baby, on several occasions, ate as many as six hard-boiled eggs in addition to a full meal. Dr. Davis kept track of the beef intake of a baby over a period of many days. He would go along for a while eating an average portion of beef, and then his appetite for beef would begin to increase. He might work up to four times as much beef as we would ordinarily think proper, keep up that rate for several days, and then taper off. The way this craving for beef gradually increased, and then decreased again, suggested to Dr. Davis that there was a real bodily need for something in that beef which influenced the appetite for days. Dr. Davis eventually carried out the experiment with many older children, too, even hospital patients, and found that the results were just as good.

211. **What parents can learn from Dr. Davis.** The good results from this experimental method of feeding don't prove that a mother ought to serve her child six or eight dishes each meal, like the hors d'œuvres in a Swedish restaurant. But it does show that she can trust an unspoiled child's appetite to choose a wholesome diet if she serves him a reasonable variety and balance of those natural, unrefined foods *which he himself enjoys eating at present.* It means that she can let him eat larger amounts than usual of a food which his appetite craves, without worrying about the consequences. Even more important, it means that she doesn't have to worry when he develops a temporary dislike of a vegetable.

It is hard for us moderns to have this kind of confidence in our children's appetites. We have heard so much about what the scientists say we *ought* to eat that we have forgotten that our bodies have known a lot about this for millions of years. Each kind of caterpillar knows for sure what sort of leaves it can eat and refuses all others. The deer travels for miles to the salt lick when his body craves it. The robin knows what is good for him without ever attending a lecture. It is not surprising that man

should also have some instinctive knowledge of what is good for him. I don't mean that a child or grownup will *always* eat what's best for him, and I don't mean that parents don't need to know what makes a balanced diet. If a mother didn't know any better than to offer her child only white bread and coffee at every meal, there would be no chance for him to pick a well-balanced diet out of this selection, no matter how sound his instincts were. It is important for a mother to know the value of vegetables, fruits, milk, meat, eggs, whole-grain cereal, so that she can offer her child a variety that will cover all his needs. But it is just as important for her to know that her child's instincts are sound to start with, that his appetite will naturally vary, that he will probably try to pick a well-balanced diet in the long run if he isn't given too many prejudices.

212. **Let him give up certain vegetables for a while.** If he suddenly turns against the vegetable that he loved last week, *let* him turn against it. If you don't make a fuss today he will come back to it next week or next month. But if you insist on his taking it when he seems to dislike it, you only make him set in his mind that that particular food is his enemy. You turn a temporary dislike into a permanent hate. If he turns down the same vegetable twice in succession, leave it out for a couple of weeks. It is naturally irritating to a mother to buy a food, prepare it, serve it, and then have it turned down by an opinionated wretch who loved the same thing a few days ago. It is hard for her not to be cross and bossy at such a time. But it is worse for the child's feeling about food to try to force or urge it. If he turns down half his vegetables for a while, as is common in the second year, serve him the other ones that he does like. This is the wise and pleasant way to take advantage of the great variety of fresh and canned vegetables that we have. If he turns against all vegetables for a while, but loves his fruit, let him have extra fruit. (See Section 237 for vegetable substitutes.)

213. **What to do if he is tired of cereal.** Many babies get "fed up" with cereal sometime in the 2nd year, especially for supper. Don't try to push it in. There are many substitutes you can offer, which are discussed in Section 241. Even if he wants to give up *all* starches for a few days or weeks, it won't hurt him.

214. **Don't be alarmed if he wants less milk at times.** Milk is

a very valuable food. It provides good amounts of most of the elements that are important for a child's diet, as is explained in Section 231. But it is helpful to remember that in the parts of the world where there are no cows or goats, children get these substances from other foods after their nursing period is over. It's also good to know that an average of a pint (16 ounces) a day will safely cover the needs of almost every child between 1 and 3 who is taking a reasonable diet otherwise. Many children between the ages of 1 and 2 want to cut down to a total of 16 to 20 ounces a day, at least temporarily. If a parent worries and sets to work to urge or force a larger amount, the child is apt to become steadily more disgusted. In the long run, he takes less milk than if he had been left alone.

Don't keep offering the cup again after he has shown that he's not interested. Every time he has to decline it, it makes him more determined he doesn't want it. If he drops down to an average of 8 ounces, wait a few days and see if he doesn't increase again.

If he goes on drinking less than a pint, there are many other ways that milk can be used in the diet, which are discussed in Section 232. Milk in any of these forms is just as nutritious as when it comes straight from the cow.

If a child goes on for 2 or 3 weeks averaging less than a pint of milk *in all forms,* the mother should report it to the doctor. He can prescribe calcium in some other form until the child's appetite for milk comes back.

215. **Be wary of feeding problems now.** The reason for discussing the natural variations in a child's appetite at this age is an important one. Feeding problems start more commonly between 1 and 2 years than at any other period. Once a child becomes balky, once a mother becomes worried, the fat's in the fire. The more the mother frets and urges, the less the child eats. And the less he takes, the more anxious the mother is. Meals become agonizing. The problem may last for years. The tension that grows up between parent and child causes other behavior problems, too.

The best way to keep your child eating well is to let him go on thinking of food as something he wants. Allow him to eat a larger than usual amount of one wholesome food, less or none

of another if that's the way he feels. When making up his meals, select a well-balanced diet, but select it from among the wholesome foods that he really enjoys. Expect his taste to change



Time to end the meal. (See Section 141 about high chairs.)

from month to month. If you cannot consult a doctor about additions to his diet, look ahead to Sections 231 to 241 for new foods, and those to substitute for the ones he is leaving out temporarily.

The chances are great that if you don't make a battle of it, your child will eat a reasonably balanced diet from week to

week, though it may be somewhat lopsided from meal to meal or day to day. If it stays unbalanced for weeks, you should discuss the problem with a doctor, even if it is difficult to reach him.

216. Standing and playing at meals. This may be quite a problem, even before the age of a year. It comes about because the baby is less ravenous for his food, more interested in all kinds of new activities like climbing, handling the spoon, messing in the food, tipping the cup upside down, dropping things on the floor. I've seen a one-year-old being fed a whole meal standing up backwards in the high chair, or even being followed around the house by a long-suffering mother with a spoon and dish in her hands.

Fooling at meals is only a sign that a child is growing up, and that his mother is sometimes more keen about his eating than he is. It's inconvenient to let it go on, and it's apt to lead to feeding problems, too. It's not difficult to get a child over it. You'll notice that he climbs and plays when he's partly or completely satisfied, not when he's really hungry. So, whenever he loses interest in his food, assume he's had enough, let him down from his chair, and take the food away without calling attention to it. Stay friendly. If he should immediately whimper for his meal, as if to say he didn't mean he wasn't hungry, give him another chance. But if he shows no regret, don't try to give him the meal a little later. If he gets extra hungry between meals give him a little more than usual at his between-meal feeding, or give him his next regular meal early. If you will *always* stop the meal casually when he loses interest, he will do his part by paying attention when he is hungry.

Now I want to make a reservation. A baby around a year has a powerful urge to dip his fingers into the vegetable, or squeeze a little cereal in his hand, or stir a drop of milk around on the tray. This isn't fooling. He may be opening his mouth eagerly for food at the same time. I wouldn't try to stop the meal for this alone, and I wouldn't try to stop him from experimenting with the feel of his food. If he tries to turn the dish over, hold it down firmly. If he insists, keep it out of reach for a while.

217. Let him feed himself early. The age at which a baby feeds himself depends largely on the adult's attitude. Dr. Davis,

in her experiments on what diets babies choose, found that some infants were efficiently spoon-feeding themselves *before the age of a year*. At the other extreme an overprotective nurse will swear that her 2-year-old couldn't possibly feed himself at all. It all depends on when you give him a chance.



Feeling is learning.

Most babies show an ambition to manage the spoon by a year and, if they have opportunity to practice, a lot of them can do a good job without help by 15 months. Some don't develop the skill till nearer 18 months.

A baby gets some preparation for spoon-feeding way back at 6 months, when he holds his own zwieback. Then around 9 months, when he gets chopped meat, he'll want to pick up the pieces and put them in his mouth. The baby who has never been allowed to feed himself with his fingers is apt to be delayed in taking to spoon-feeding.

A polite baby of 10 or 12 months may just want to rest his hand on his mother's when she's feeding him. But most of them, when the urge comes, try to yank the spoon out of the mother's hand. A mother may think this has to be a tug of war, but she

can give the baby that spoon and get another to use herself. The baby soon discovers that it's more complicated than just getting possession of the spoon. It takes him weeks to learn how to get a speck of food on the spoon, and weeks more to learn not to turn it upside down between the dish and the mouth. He'll become bored with trying to eat, and stir or slop the food instead. Then it's time to move the dish out of reach, perhaps leaving a few crumbs of meat in front of him to experiment with.

Even when he's trying very hard to feed himself correctly, he'll make plenty of accidental messes, and this you've got to put up with. If you're worried about the rug, put a big piece of oilcloth under his chair. It helps to use a hot-water plate with partitions. This keeps his food warm, is harder for him to pick up, and has straight sides to push the food against. Baby spoons with looped handles are meant to be easy to hold, but I think they are more difficult than small spoons with straight handles.

Now we come to the most important point. It isn't enough to let the baby have a spoon and a chance to use it, you've got to gradually give him more *reason* to use it. At first he tries because he wants to do things for himself. But after he sees how complicated it is, he's apt to give up the whole business *if you keep on rapidly feeding him anyway.* In other words, when he begins to be able to get a speck to his mouth, you ought to let him have a few minutes alone with the food, at the beginning of the meal when he's hungriest. Then his appetite urges him on to keep trying. The better he gets at it, the longer he should have at each meal to do it himself.

By the time he can polish off his favorite dish in 10 minutes, it's time for you to be out of the picture. This is where mothers often go wrong. They'll say, "He can eat his own meat and fruit all right now, but I have to feed him his vegetable, potato, and cereal still." That's a little risky. If he's able to manage one food, he has skill enough to manage the others. If you go on feeding him the ones he doesn't bother with, you will build up a sharper and sharper distinction between the foods *he* wants and the foods *you* want him to take. In the long run, this takes away his appetite for *your* foods. But if you put thought into serving as well-balanced a diet as possible from among the foods he is

presently enjoying, and let him feed himself entirely, the chances are great that he will strike a good balance from week to week, even though he may slight this or that food at certain meals.

Don't worry about table manners. A baby wants to eat more expertly, more neatly, all by himself. He wants to graduate from fingers to spoon and from spoon to fork, as soon as he feels equal to the challenge, just as he wants to try everything else difficult that he sees others doing. Dr. Davis noticed this in the babies she was observing, and they weren't coached at all. She pointed out that puppies show the same urge to learn eating manners without teaching. In the beginning, they stand in a pan of milk and dip their faces. First, they learn to keep their feet out; next, to lap the milk without dipping their faces; finally, to lick their whiskers politely at the end.

I have been making quite a point about letting a child learn to feed himself somewhere between the ages of 12 and 18 months (by 15 months if he is skillful), because that is the age when he wants to try. Suppose a mother keeps a baby from doing it at this age, and then at 21 months declares, "You big lummox, it's time for you to feed yourself." Then the child is apt to take the attitude, "Oh no! It's my custom and my privilege to be fed." He's now reached a more advanced stage, where trying to manage a spoon is no longer exciting. In fact, his whole sense of what's proper rebels against it. The mother has lost the golden opportunity.

Don't take this all so seriously that you think there is only one right age, or worry because your baby is not making sufficient progress, or try to force him to feed himself when he's not ready or not eager. That would only create other problems. I'm only making the point that babies want to learn this skill earlier than many mothers realize, and that it is important for the parent to gradually give up feeding as the child is able to take over.

Elements in the Diet

Before we talk about the everyday foods that children can eat, we ought to discuss the more important chemical substances that foods are composed of, and what the body uses them for.

You can compare a child's body in one way to a building under construction. A lot of different materials are needed to build it and to keep it in repair. But a human being is also a machine that's running. It requires fuel for energy, and other substances to make it work properly, just as an automobile needs gasoline, oil, grease, water.

PROTEIN

218. **Protein** is the main building material of the body. The muscles, heart, brain, kidneys, for instance, are largely made of protein (aside from water). The structure of bones is protein, filled in with minerals, much the way a collar is made stiff with starch. The child needs good food protein to continually increase the size of every part of his body, and also to repair "wear and tear."

Most natural foods contain protein, some much, some little. Meat, poultry, fish, eggs, milk are the foods that are richest in it. They are the only foods that supply "complete proteins"—that is to say, they contain the complete variety of protein elements the human body needs. That is why a child should be averaging a pint to a quart of milk daily and also be receiving either meat (or poultry or fish) or eggs daily, preferably both. Next in importance are the proteins in whole-grain cereals, nuts, and mealy vegetables (soy and other beans, peas). These grain and vegetable proteins are only fair in amount, and are also "incomplete." Whole wheat, for example, contains some essential protein elements, beans contain others. If a child is eating a variety of whole grains and vegetables, they will supplement the proteins from his meats, fish, eggs, milk, but will not take their place.

MINERALS

219. **Minerals** of many kinds play a vital part in the structure and in the working of every part of the body. The hardness of bones and teeth depends on calcium and phosphorous. The substance in red blood cells that carries the oxygen to all regions of the body is made partly of iron and copper. Iodine is necessary in the functioning of the thyroid gland.

All natural unrefined foods (fruits, vegetables, meats, whole grains, eggs, milk) contain a variety of valuable minerals. But the refining of grains and the prolonged cooking of vegetables in a lot of water removes a great deal. Those most likely to be insufficient in the diet are calcium, iron, and, in certain areas, iodine. Calcium occurs in small amounts in vegetables and some fruits, but plentifully in milk (and cheese). Iron is supplied by green, leafy vegetables, meats, fruits, whole grains, but more abundantly by egg yolk and liver. Iodine is missing in some inland regions where the drinking water, vegetables, and fruits lack it, and sea food is not available. Table salt is "iodized" for people in those areas, to prevent goiter.

VITAMINS

Vitamins are special substances which the body needs in minute amounts in order to work right, somewhat the way any machine needs a few drops of oil, or a gasoline motor depends on a tiny electric spark.

220. **Vitamin A** is necessary to keep healthy the linings of the bronchial, intestinal, and urinary systems, and various parts of the eyes, including that which enables us to see in dim light. The body gets it plentifully from milk fat, egg yolk, green and yellow vegetables, fish-liver oil. Probably the only people who receive too little are those on really bad diets or those who cannot absorb it because of serious intestinal disease. These people may be subject to bad colds because of the deficiency, and that is the reason it is called the "anti-infective vitamin" in advertisements. There is no reason to believe, though, that the person on a decent diet will catch fewer colds by taking more and more vitamin A.

221. **Vitamin B complex.** Scientists used to think that there

was just one vitamin B, which had several actions in the body. But when they studied "it," it turned out to be at least ten different vitamins. However, these mostly occur in the same foods. Since they are not yet all known or understood, it is more important for people to eat plenty of the natural foods they mostly occur in, rather than to take them separately in pill form. The three known to be most important for human beings are known by their chemical names now: thiamin, riboflavin, niacin. Every tissue in the body needs these three vitamins.

Thiamin (B_1). This vitamin occurs in fair amounts in whole grains, milk, eggs, liver, meat, and certain vegetables and fruits. It is destroyed by long cooking, especially when soda is used. People are apt to receive an insufficient supply of it when they eat a lot of refined starches and sugars. Lack of thiamin can cause poor appetite, slow growth, fatigue, stomach and intestinal troubles, neuritis. (However, there are many different causes of all these symptoms, and thiamin deficiency is not the most common one.)

Riboflavin (also known as B_2 or G) occurs abundantly in liver, meat, milk, eggs, green vegetables, whole grains, yeast, so a reasonable diet should provide plenty. Deficiency causes cracks in the corners of the mouth and other lip, skin, mouth, and eye troubles.

Niacin (nicotinic acid) occurs abundantly in about the same foods as riboflavin (except milk). Deficiency causes mouth, intestinal, and skin troubles which are part of the disease called pellagra.

222. **Vitamin C** (ascorbic acid) occurs most abundantly in oranges, lemons, grapefruit, raw and properly canned tomatoes and tomato juice, raw cabbage. It occurs in fair amounts in several other fruits and vegetables, including potatoes. It is easily destroyed in cooking. It is necessary for the development of bones, teeth, blood vessels, and other tissues, and plays a part in the functioning of most of the cells in the body. Deficiency is commonest in babies living on cow's milk without orange or tomato juice or vitamin C medicine, and shows itself in painful hemorrhages around the bones and in swollen, bleeding gums. This condition is called scurvy.

223. **Vitamin D** is needed in large amounts for growth, par-

ticularly of the bones and teeth. It helps get calcium and phosphorus, which are in the food in the intestines, absorbed into the blood and deposited in the growing parts of the bones. That's why it's so necessary for children, especially in the period of rapid growth in infancy. Ordinary foods contain only a small amount. The sun's rays' shining on the fat in people's skins manufactures vitamin D right there, and that's how they naturally get it when they live outdoors and wear few clothes. When they live in colder climates, they cover up their bodies with clothes and live indoors. The sun's rays in these regions are more slanting and are shut off by soot in the air and by window glass. Various fish-liver oils are then the best source of vitamin D. (Fish store it in their livers by eating minute plants that float on the surface of the ocean. Sunshine manufactures it in these plants.) Vitamin D deficiency results in soft, bent bones, poor teeth, weak muscles and ligaments. This is called rickets.

Fully grown people probably receive enough vitamin D from the small amounts in eggs, butter, fish, and from a little sunshine. But the child who is not getting lots of sunshine should take a special preparation of vitamin D until he has reached his full height in adolescence. Mothers need extra during pregnancy and breast feeding.

WATER AND ROUGHAGE

224. **Water** provides no calories or vitamins, but it is vitally important in the make-up and working of the body. (A baby's body is 70 per cent water.) A child should have a chance to drink water once or twice in each between-meal period, more often in hot weather. Most foods are largely composed of water, too, and that is how people receive part of their daily needs.

225. **Roughage** means the fibers in vegetables, fruits, and grains (bran, for instance), that our intestines can't digest and absorb. The roughage passes on in the bowel movement, unused in one sense but useful in another. It provides part of the bulk in the bowel contents that helps to stimulate the intestines to function. If a person stays on a "bland diet," let's say milk and broth and eggs, he is apt to become constipated from having too little substance left in his lower intestines.

FATS, STARCHES, SUGARS

226. **Fuel.** So far we have discussed the building materials of the body and the other substances that are necessary to make the system work right. But we haven't considered fuel. The body, being a sort of engine, requires constant fueling just as an automobile needs gasoline. When a person is asleep, the heart still beats, the intestines contract, the liver, kidneys, and other organs keep working. This is like an automobile in neutral with the motor idling. When the person wakes up, moves around, works, runs, he burns more fuel just as the automobile does. Most of the food a child eats is used up daily for fuel, even when he is growing rapidly.

The fuel substances are starch, sugar, fat (and, to a slight degree, protein). A starch is composed of a chemical combination of sugars. In the intestine it is broken up into sugars before it is absorbed into the body. Because starches and sugars are so closely related, they are lumped together under the term "carbohydrates."

227. **The body's fat.** When a person eats more fat, sugar, starch, and protein than he needs for fuel, the extra is converted into fat and stored under his skin. When he is eating too little "fuel" he uses up some of his own fat and becomes thinner. This "fat pad," that all people have to a greater or lesser degree, serves not only as a storehouse of fuel but helps, like a blanket, to keep a person warm.

228. **Calories.** The fuel value of food is measured in "calories." Water and minerals have no calories—that is, they have no fuel or energy in them. Fat is rich in calories, an ounce of it having twice as many as an ounce of starch, sugar, or protein. Butter, margarine, vegetable oil, which are almost entirely fat, and cream and salad dressings which contain a lot of it, are therefore very high in calories.

Sugars and syrups are also very high in calories, because they are wholly carbohydrate and contain no water or undigestible roughage.

Grains (which we eat as cereals, breads, crackers, macaroni, puddings, etc.) and starchy vegetables (such as potatoes, beans, corn) are high in calories, because of the large proportion of starch in their make-up.

Meats, poultry, fish, eggs, cheese are also high in calories, because of their combination of protein and fat. Most of us do not receive as many daily calories from these foods as we do from grains and starchy vegetables, because we eat them in smaller amounts. Milk is also a fine source of calories, because of its sugar, fat, and protein, and because it is easily taken in good amounts.

Fresh and stewed fruits in general provide a fair number of calories, because of the natural sugar they contain. Bananas and dried fruit are richer (comparable to potatoes).

Vegetables vary from moderately high to low in calories (mostly in the form of starch and sugar). The vegetables with a moderately high number of calories are white and sweet potatoes, corn, such beans as soy, navy, baked, lima beans. The vegetables that provide a fair number of calories are peas, beets, carrots, onions, parsnips, squash, beet greens. Vegetables low in calories are string beans, cabbage, cauliflower, celery, eggplant, spinach, tomatoes, lettuce, swiss chard, broccoli, asparagus.

SENSIBLE DIET

229. **Keep a balanced attitude.** You don't judge foods on calories alone, or on vitamins alone, or on minerals alone. Everybody in the long run needs a balance of low and high caloric foods as he needs a balance in other respects in his diet. If a person takes one aspect of diet too seriously and forgets the others, it's apt to lead to trouble. An adolescent girl acquires a fanatical zeal to reduce, leaves out all the foods in which she has heard there are more than a few calories, tries to live on vegetable juices, fruit, and coffee. She is bound to be sick if she keeps on. A serious-minded mother who has the mistaken idea that vitamins are the whole show and that starches are inferior, serves her child carrot salad and grapefruit for supper. The poor fellow can't get enough calories out of that to satisfy a rabbit. A plump mother from a plump family is ashamed of her child's scrawniness, serves him only rich foods. These depress his appetite further. Taking them in small amounts, he is apt to be deprived of minerals and vitamins.

230. **A simple guide to diet.** The whole business of diet

sounds complicated, but it needn't be. Fortunately, a mother doesn't have to figure out the perfect diet for her child. The experiments of Dr. Davis and others have shown that the child's own appetite seeks a well-balanced diet in the long run (Section 210), *provided* he hasn't been urged or given prejudices against foods, and provided he is offered a reasonable variety of wholesome, natural, unrefined foods. The parents' job is to have a general idea of the kinds of foods that combine to make a good diet, and which ones can be substituted for those that the child has lost his taste for. Roughly speaking, the essentials come down to:

(1) Milk (in any form), averaging at least a pint between 1 and 3 years, preferably a pint and a half by 3 years
(2) Meat or poultry or fish, preferably daily
(3) Egg, daily (extra egg can partially substitute for meat and vice versa, though it is desirable to give both daily)
(4) Vegetable, green or yellow once or twice a day (some of it raw)
(5) Fruit, 2 to 3 times a day, at least half of it raw, including orange juice (extra fruit can substitute for vegetable and vice versa)
(6) Starchy vegetable, 1 or 2 times a day
(7) Whole grain bread, crackers, cereals, 1 to 3 times a day (enriched starches can be substituted occasionally)
(8) Vitamin D preparation

Now we are ready to discuss actual foods.

Foods and Meals

What foods should be added to a child's diet and at what ages, are individual matters which his own doctor should decide. It depends on how his digestion has handled various foods in the past, which ones he is refusing, which ones are available in the market.

This chapter is for the benefit of parents who are unable to consult a doctor regularly and have to depend on their own knowledge over long periods of time. If you are in this situation, use all your common sense. Avoid the idea that there is an exact age for a certain food. Start new foods gradually even in the 1- to 2-year-old period. Go slow and play safe with the child who has bowel upsets easily.

There is a detailed and practical book, *All About Feeding Children,* by Milton J. E. Senn, M.D., and Phyllis Krafft Newill,[1] for mothers who would like advice on planning, preparing, and serving children's meals.

MILK

231. Milk after a year. Milk contains almost all the food elements that a human being needs: protein, fat, sugar, minerals, and most of the vitamins. Children who are taking a well-balanced diet except for milk are likely to get enough of *most* of these elements from other foods. The exception is calcium. Milk is the only food that contains a lot of it. That is why you would like a child to average a pint a day, in some form, between 1 and 3 years (up to a quart if he wants it), and a pint and a half after the age of 3 (up to a quart if he wants it).

Remember, though, that many children want less one day or one week, more the next, and that the surest way to keep them liking it is to let them take less, temporarily, when they feel that way. If your child cuts down to less than a pint in all forms, don't urge him. If he isn't back to a pint in a week or two, think of all the other ways you can serve milk.

232. Substitutes for plain milk. Cooked cereals can be made with milk instead of water. Precooked and dry cereals absorb a lot in preparing. There are all the milk puddings from junket to rice pudding. Vegetable and chicken soups can be mixed with milk instead of water. Baked macaroni, scalloped and mashed potatoes, and many other cooked dishes can be made with milk.

What about flavoring milk? It is better to avoid flavoring if the child will take a reasonable amount of milk in other forms. But, if necessary, milk can be made into cocoa or chocolate,

[1] Garden City, N. Y.: Doubleday Doran, 1944, $2.50.

served hot or cold, or flavored with a little chocolate syrup. Chocolate upsets some small children, so it is preferable to wait until the age of 2, and to start very gradually. Milk can be flavored with vanilla or any of the commercial cereal-and-malt preparations sold for this purpose. With any flavoring, avoid making the milk really sweet, for fear of spoiling appetite. Sipping a drink through a straw or glass tube may make it seem like a treat.

A flavored drink is likely to lose some of its appeal, anyway, when the novelty wears off. This is especially apt to happen if the mother begins to urge it the first time the child takes less than a glassful. It can't be repeated too often that when a parent says, "Drink a little more of your chocolate milk" (or anything else), it begins to take away a child's appetite.

Cheese is a useful form of milk. An ounce of most varieties contains about the same amount of calcium as 8 ounces of milk. But there are two important exceptions. You need 3 times as much cream cheese (3 ounces) to supply the amount of calcium in an 8-ounce glass of milk. Cottage cheese provides still less; in fact, it takes 10 ounces of cottage cheese to supply the calcium that is in 8 ounces of milk.

Cottage cheese is the most easily digested, having little fat, and so it can be eaten in larger amounts, salted or mixed with grated raw vegetables or a little jelly. Other cheeses, being rich in fat, should be started gradually, and the child will probably want only small amounts. They can be served as spreads, or grated into other foods, or in pieces.

If a child doesn't want to take milk in any form (or is allergic to it) he should be receiving calcium in some other form that the doctor prescribes.

Butter or fortified margarine should be added very gradually to vegetables and to bread around the age of a year. Top milk can also be introduced slowly on cereal, puddings, fruits, for the child who is hungry. The digestive system needs time to adjust to increased amounts of fat.

MEATS, FISH, EGGS

233. **Meat.** Pork, veal, and ham have not been as frequently recommended for small children as beef, lamb, chicken, liver.

However, you can give roast veal cautiously beginning at a year if you are serving it for the rest of the family. Roast pork can also be given cautiously at a year if the fat is cut off. Pork is an excellent source of vitamins. It should be thoroughly cooked, so that it is white all through, not pink. Incompletely cooked pork is the source of the dangerous disease trichinosis. Better wait until 3 before beginning small amounts of ham (not fried), beef frankfurters, and duck.

234. Fish of the white, nonoily varieties, such as cod, haddock, halibut, flounder can be started cautiously at the age of a year, baked, boiled, or broiled. It should be carefully crumbled with the fingers to remove bones. The more oily fish and canned fish may be added gradually at 2. Some children love fish, and then it makes a fine substitute for meat once or twice a week. But many others stay firmly opposed even after several trials. Don't urge it.

235. **Eggs.** Eggs are equally valuable hard boiled, soft boiled, scrambled, cooked into foods, or served in drinks. It is desirable for a child to have an egg a day if he likes them. They can be served twice a day if desired.

If a child dislikes most meats and fish, or you cannot get them, his protein needs will probably be covered by 1½ to 2 pints of milk and 2 eggs a day, since he will be getting some protein in his whole grains and vegetables.

If a child dislikes eggs or is allergic to them, it is more important for him to be having meat regularly.

VEGETABLES

236. **Varieties of vegetables.** The baby during his first year will probably have had most of the following vegetables: spinach, peas, onions, carrots, asparagus, chard, squash, tomatoes, beets, celery, potatoes.

Before a year the change should have been made gradually from puréed to a coarser, lumpy consistency. (Naturally some puréed and finely mashed vegetables can still be served.) Peas should be mashed slightly to avoid being swallowed whole.

Sweet potatoes or yams can be used at times instead of white potatoes beginning at a year. If you have been sticking to the easily digested vegetables up to the age of a year, you can try

gradually the less popular and sometimes less digestible ones, such as lima beans (mashed), broccoli, cabbage, cauliflower, turnips, parsnips. Some children like them and digest them well, but many won't touch them. Wait until 2 years to serve corn in the kernel. Young children don't chew it, it comes through unchanged, and may irritate the bowels. Use only tender corn. When cutting it off the cob, don't cut too close. Then each kernel will be cut open. At 3 or 4, when you start corn on the cob, slice down the center of each row of kernels, so that they will all be open.

The more easily digested raw vegetables are usually started between 1½ and 2 years for the child with a good digestion. The best are peeled tomatoes, lettuce, sliced string beans, shredded carrots, scraped chopped celery. They should be well scrubbed. Go slow at first and see how they are digested. Orange juice or sweetened lemon juice, with a little salt, can be used for dressing.

Raw vegetable juices can be started slowly at the same time. Raw vegetables and vegetable juices are not only as good as cooked vegetables for the child who digests them well—they are better, because the vitamins have not been partly destroyed by heat, and minerals and vitamins have not been dissolved out in the cooking water.

If a child has temporarily turned against plain vegetables, remember vegetable soups: pea, tomato, celery, onion, spinach, beet, corn, and the soups which contain a large amount of mixed vegetables.

237. **Temporary substitutes for vegetables.** Suppose a child has refused vegetables in any form for weeks. Will his nutrition suffer? Vegetables are particularly valuable for various minerals and vitamins, and also for roughage. But a variety of fruits will supply many of the minerals and vitamins, and the same amount of roughage. If the child is taking his fish-liver oil, milk, meat, and egg, he will be getting the other salts and vitamins that fruits do not provide so well. In other words, if your child dislikes all vegetables but likes fruits, don't fuss about what he is missing. Serve him fruit two or three times a day and forget about vegetables for a few weeks. If you don't make an issue

about them, the chances are great that his appetite will swing around to them again in time.

FRUITS

238. Fruits. A baby during his first year will probably have had stewed or canned applesauce, apricots, prunes, pears, peaches, pineapple, raw, ripe banana, and apple. By a year some of these should be served in a lumpy consistency. Canned fruits, such as pears, peaches, pineapple put up for adults are not desirable for children, because they are heavily sweetened with syrup.

Raw fruits such as apples, oranges, peaches, pears, apricots, plums, seedless grapes, are usually added between the ages of 1 and 2 years for children with good digestions. They should be thoroughly ripe. Peel them until the child is 3 or 4 years old. When the peel is left on, the fruit should be washed to remove chemicals used in spraying.

It is usually recommended to wait until the age of 2 to add cherries and raw berries (strawberries, raspberries, blackberries, blueberries, huckleberries, loganberries). Strawberries sometimes cause a rash. Small children swallow berries whole and pass them that way, so mash them until your child chews well. Remove cherry pits until he can separate them in his mouth. At whatever age you start berries, start gradually and stop if they cause upsets.

Cantaloupe, honeydew melon, avocado can be started cautiously at 2. Begin with small amounts, mashed. Watermelon is considered less digestible and is usually postponed for another 2 or 3 years.

Dried fruits, such as prunes, apricots, figs, dates, can be given unstewed at 2, chopped in salads, or whole for nibbling. They should be well washed unless the package states they are ready for eating raw.

CEREALS AND SUPPERS

239. Cereals. A baby at a year can, and probably will, be taking one or a variety of the precooked cereals, and also cooked oatmeal and cooked whole-wheat cereals. If he likes these, continue to serve them once or twice a day indefinitely.

If he gets bored with one, try another that he may not have been as keen about before. You can also serve occasionally boiled unpolished rice, hominy, or one of the refined wheat cereals.

"Dry" cereals are not commonly recommended for children under 5, for two reasons. They are bulky for their weight, which means that the stomach is full before much is eaten. They are also coarse in texture and therefore may irritate the bowels of some children. If a child has lost interest in all other cereals and substitutes, but likes dry cereals and digests them well, it is better for him to be getting them in this form than not at all. They should be started gradually, preferably not before the age of 2. Whole-wheat and oat dry cereals are the valuable ones, because they are rich in vitamins and minerals. (Corn and rice are less valuable.)

240. **Breads are cereals.** If a child is sick of his ordinary cereal for breakfast, you can give a slice of bread, toast, a roll, a bun made of whole, cracked, or enriched wheat, rye, oatmeal, or banana bread. A cereal in baked form is just as valuable as in boiled form. The fact that it is not hot makes no difference in its food value or digestibility. Spread with butter or margarine (starting with a small amount for the 1-year-old). You can also spread with puréed fruit or a light touch of marmalade if it makes the bread more appealing.

The problem of substitutes for cereal comes up more often at suppertime and brings up the larger question of what that meal should consist of, anyway.

241. **Suppers.** "He's getting bored with his supper of cereal and fruit, and I can't think what to give him," mothers often complain during the second year. Supper should be an easy meal to plan and to vary. It doesn't need to be as conventional as breakfast or lunch.

If you are going to branch out at suppertime, it's good to have a simple rule to guide you, so that you won't serve two filling dishes one night and two skimpy ones another night. A good rough rule is to serve:

(1) Either a fruit or vegetable, *and*

(2) A filling dish with plenty of calories.

Let's start with the filling dish. Cooked and precooked cereal

can be made more appealing by adding sliced raw fruit, stewed fruits, chopped dried fruit, or a little brown sugar, honey, or molasses.

Breads and sandwiches of several kinds can be substituted for cereal as the baby grows older. When he's only a year old, he makes slow work of bread, and he always pulls a sandwich apart to get at the filling. But nearer to 2 years he can handle these well. You can use rye bread, whole-wheat bread, oatmeal bread, enriched white bread, banana bread, to start with, and by the age of 2 add pumpernickel, nut bread. Spread with a little butter, margarine, cottage or creamed cheese. You can add a touch of jam, jelly, marmalade, honey, or a few grains of brown sugar for flavor, if this is necessary to make the sandwiches appealing, but I wouldn't put on a real layer of any of these sugary substances. By the age of 2, sandwiches can be made with a wide variety of foods, plain or in combination: raw vegetable (lettuce, tomato, or grated carrot or cabbage), stewed fruits, chopped dried fruits, peanut butter, egg, canned fish, minced or sliced poultry and meats. Cheese can be used as a spread, or grated, and later in thin slices. Creamed cheese or, after the age of 3, a little mayonnaise, can be combined with many of the substances listed above.

A fairly substantial dish for occasional use is a broth or soup containing lots of barley, rice, or noodles; or a vegetable soup, plain or creamed, with a couple of handfuls of toast cut into small cubes to toss in.

A poached or coddled or scrambled egg can be given (in addition to or instead of the breakfast egg), on toast or with toast crumbled into it.

Crackers (preferably whole-wheat or graham) can be served plain, or with a spread, or in a bowl of hot or cold milk. Bread and toast in slices or pieces, salted, can also be served in a bowl of cold or hot milk.

Potato is also a good filling supper dish if the child is fond of it. Macaroni, spaghetti, or noodles can be used occasionally.

Instead of a filling first course followed by stewed or raw fruit, you can occasionally serve, first, a cooked green or yellow vegetable, or a vegetable or fruit salad. Then follow with a milk-pudding dessert: custard, baked or boiled; rice, tapioca,

bread, cornstarch puddings; occasionally ice cream for the older child.

A banana makes an excellent filling dessert at supper and can also be used as a cereal substitute for breakfast.

Junket and gelatin desserts in various flavors can also be served occasionally, but they don't contain enough calories to act as the appetite-satisfying dish of the meal.

There are some children who never want and never seem to need much starch. They are able to get enough calories from milk, meats, fruits, vegetables, to gain weight reasonably. Their B complex vitamins they also get from these same foods. In other words, grains and other starches are the things you least need to worry about in your child's diet. Let him go without them for weeks if he is doing well otherwise.

Parents who have supper early may prefer to let the child have his main meal of the day, with meat, potato, vegetable, at that time with them. There is no harm to this arrangement if the child gets to bed and to sleep at a good hour. Then lunch becomes a "light" meal like the suppers that have been suggested in this section.

LESS DESIRABLE AND UNDESIRABLE FOODS

242. **Cookies, cakes, rich crackers, pastries.** The main objection to these foods is that they are largely composed of refined starch, sugar, and fat. Being rich in calories, they quickly satisfy a child's appetite, but give him practically no salts, vitamins, roughage, or protein. In other words, they cheat him by making him feel well fed when he is being partly starved, and by spoiling his appetite for better foods.

You don't have to be so suspicious of rich, refined foods that you stop your child from eating cake at a birthday party. It's the steady diet of such foods that deprives him of nutrition. But there's no sense starting them at home when there is no need.

Filled pastries, such as custard and cream pies, éclairs, cream puffs, have an additional danger. Harmful bacteria grow readily in these fillings if they are not kept well refrigerated. They are a frequent cause of food poisoning.

243. **Highly sweetened foods** are also undesirable in the diet. They quickly satisfy the appetite, take it away for better foods.

They are believed to favor decay of the teeth. If a child likes his cereal and fruits without extra sugar by all means leave it off. If a thin sprinkle of sugar, preferably brown, or a few drops of honey or molasses make a big difference, let him have it without an argument. But be cheerfully firm about not letting him pour it on thick. *Jellies, jams, most canned fruits* (except those put up for babies) contain excessive amounts of sugar, and it's best not to get in the habit of serving them. If a child enjoys his bread and butter only when there is jam on it, put on just enough to flavor it. If occasionally it is convenient to give him canned peaches because the rest of the family is having them, pour off the syrup.

Candy, sodas, ice cream, sundaes, being sweet, deprived foods, bring up special problems, because they are often eaten between meals, when they have their worst effect on appetite, and because so many children want them. Ice cream is subject to spoiling and can carry infection like plain milk. For children it should be of a reputable make, bought in a clean store. There is no reason why a child of 2 years or more shouldn't occasionally have a serving of good ice cream or a piece of candy at the end of a meal when the rest of the family is enjoying them. But it's better to avoid sweets between meals as much as possible, and to avoid candy regularly, even at the end of meals. Candy, particularly, is suspected of favoring decay of the teeth, because it keeps the mouth syrupy for some time.

It's easy enough to keep *young* children from the candy habit by not having it around the home, and to avoid sodas and sundaes by not buying them. It is more difficult in the case of the school-age child who has found out all about these delights. A mother hates to make her own child an exception or a sissy. If he only has the desire once in a while it's probably best to let him be one of the boys. But if he craves sweets, and especially if he has teeth that decay easily, it's better for the parents to limit him strictly. They can offer substitutes. At the present time, dentists believe that there are protective substances in naturally sweet foods like raisins, dates, figs, dried prunes, which make them harmless to the teeth. Another substitute is chewing gum.

244. **Craving for sweets is often caused by parents.** Children

like sweets for one reason because their hungry, growing bodies recognize the extra calories in them. But it is not certain that unspoiled children want a lot of them. A few small children actually dislike all sweet foods. Dr. Clara Davis in her experiments in letting children choose their own diets from a variety of *natural* foods found that in the long run they only wanted a reasonable amount of the sweeter foods.

I think much of the exaggerated craving for sweets is caused unwittingly by parents. A mother, trying to get her child to finish his vegetable, will say, "You can't have your ice cream until you've finished your spinach," or, "If you eat up all your cereal, I'll give you a piece of candy." When you hold back on food (or a prize of any kind), it whets the desire. This has exactly the opposite effect from what the mother wants: the child gets to despise spinach and cereal, and to want ice cream and candy more and more. I'd say jokingly that the only safe way to bribe a child about food would be to say, "You can't have your spinach until you've eaten your ice cream." Seriously, though, *never* hold back on one food until another is eaten. Let your child go on thinking his plain foods are just as good as his sweet ones. If, one day, he catches sight of his dessert first and asks for it, let him have it right away, willingly.

245. **Corn, rice, and refined wheat are less valuable foods.** Corn and rice are relatively low in vitamins and valuable proteins (even before they are refined), when compared to oats, and rye, and whole wheat. And when any grain is refined, much of its vitamins, minerals, and roughage are removed in the process. Therefore, the foods to serve less frequently are: refined (white) wheat cereals, white bread that is not enriched, macaroni, spaghetti, noodles, crackers (aside from whole wheat and graham crackers), rice, corn meal, corn cereals, hominy. Then there are the desserts made from these grains: cornstarch, rice, tapioca puddings. When rice is used for cereal, puddings, and as a substitute for potato, it is better to use the unpolished brown rice. "Enriched" white bread has had some of the original B complex vitamins restored, but it does not contain all the values in whole-wheat bread.

You may think that I am exaggerating the dangers of refined sweets and starches. I certainly don't want to turn you into a

food crank who scolds his friends for serving white bread, or who haunts the "health food" stores looking for raw and coarse substances to munch. But there are plenty of children who get their daily carbohydrates somewhat as follows. Breakfast: a white cooked cereal (with lots of sugar) and a slice of white toast with marmalade. Lunch: macaroni, white bread and jam. Midafternoon: ice cream soda. Supper: corn flakes, cake, and a cornstarch pudding. Even if this child is also taking vegetable, fruit, meat, and 24 ounces of milk a day, he is still getting two thirds of his nourishment in a deprived form, and is in danger of developing a vitamin deficiency.

246. **Coffee and tea are not good** drinks for children, because they take the place of milk and because they contain the stimulant caffein. Most children are stimulated enough already. Flavoring a child's milk with a tablespoonful of coffee or tea may be justified if he *only* likes it in that pretend grown-up way. But in the case of most children, it's easier and safer not to get started with these beverages.

FROZEN FOODS

247. **Frozen foods** are just as good for children as fresh and canned foods, if used correctly. Freezing a food breaks it down chemically, just as cooking it does. It is then in a state where both people and germs can digest it better. In other words, a cooked or a frozen food "spoils" more rapidly than an ordinary raw food, because poisonous bacteria can live and multiply in it more easily.

That is why frozen foods should be cooked and eaten within a few hours after they are thawed out, never refrozen.

FEEDING BETWEEN MEALS

248. **Use common sense between meals.** Most young children, and plenty of older ones, too, need a snack between meals. If it's the right kind of food, given at a sensible hour, presented in the right way, it shouldn't interfere with meals or lead to feeding problems.

Fruit juice, fruit, plain crackers, or bread work best in most cases. They are easily and quickly digested. Foods that contain considerable fat, such as chocolate, rich cake and cookies, milk,

stay in the stomach much longer and are therefore more apt to take away appetite for the next meal. Occasionally, though, you see a child who never can eat very much at one meal and gets excessively hungry and tired before the next; he may thrive when given milk between meals. Its slow digestibility is what keeps him going, and he has a better appetite for the next meal because he's not exhausted.

For most children the snack is best given midway between meals, or not closer than 1½ hours before the next one. Even here there are exceptions. There are children who receive juice in the middle of the morning but still get so hungry and cross before lunch is ready that they pick fights and refuse to eat. Getting a glass of orange or tomato juice the minute they get home, even though it is 20 minutes before lunch, improves their dispositions and their appetites. So you see that what and when to feed between meals is a matter of common sense and doing what suits the individual child. A few children do best with nothing at all.

A mother may complain that her child eats badly at meals but is always begging for food between meals. This problem doesn't arise because a mother has been lenient about food between meals. Quite the contrary. In every case that I have seen, the mother has been urging or forcing the child to eat at mealtime and holding back on food at other times. It's the pushing that takes his appetite away at meals. After months of it the very sight of the dining room is enough to make his stomach revolt. But when the meal is safely over (though little has been eaten), his stomach can feel natural again. Soon it's acting the way a healthy empty stomach is meant to act—it's asking for food. The treatment, then, is not to deny the child food between meals, but to let mealtime be so enjoyable that his mouth waters then, too. What is a meal? It's a time when food is specially prepared to be appetizing. When a child finds it less appealing than snacks, something has gone wrong.

MEALS

249. Suggested guide for meals.

Breakfast

(1) Fruit or fruit juice

(2) Cereal
(3) Egg
(4) Milk

Lunch (or supper)
(1) Meat or fish or poultry (or extra egg)
(2) Green or yellow vegetable (cooked or raw)
(3) Potato
(4) Raw fruit, occasionally a pudding
(5) Milk

Supper (or lunch)
(1) A filling dish, such as:
cereal
or bread or sandwiches
or potato
or soup with crackers, toast, barley, rice, noodles, etc.
or an egg dish with toast
or (less frequently) a pudding, macaroni, or spaghetti
(2) Vegetable or fruit, raw or cooked
(3) Milk

Vitamin D preparation daily
Fruit, or tomato juice, and crackers between meals
Bread (whole-grain) at meals if desired

Managing Young Children

TOYS AND PLAY

250. Play is serious business. When we see children building with blocks, pretending to be airplanes, learning to skip rope, we're apt to think, in our mixed-up, adult way, that these are just amusements, quite different from serious occupations such as doing lessons or holding a job. We are mixed up because

most of us were taught in our own childhood that play was fun, but that schoolwork was a duty and that a job was a grind.

The baby passing a rattle from one hand to the other or learning to crawl downstairs, the small boy pushing a block along a crack on the floor, playing it's a train, are hard at work learning about the world. They are training themselves for useful work later, just as much as the high-school student studying geometry. A child loves his play, not because it's easy, but because it's hard. He is striving every hour of every day to graduate to more difficult achievements, and to do what the older kids and grownups do.

The mother of a one-year-old complains that he gets bored with hollow blocks and only wants to fit pots and pans together. One reason is that he knows already that his mother plays with pots and pans and not with blocks. That makes pots and pans more fun. It must be for this reason that one-year-olds are fascinated with cigarettes.

251. Simple toys are best. Children usually love simple toys best and play with them longest. This isn't because children are simple—it's because they have so much imagination. There are two very different kinds of toy trains. One is made of metal painted to look real, and it's meant to run on a track. The other is made of plain, flat wooden blocks that link together easily. All that the *young* child can do with the realistic train is push one car along the floor. It's too hard to put the cars on the track or hitch them together. He can't even put anything in the passenger coach until the top breaks off. After a while he gets bored. The wooden block cars are different. He can link a string of them together and admire his long train. Two make a trailer truck. He can pile small blocks on top, call it a freight train, and make deliveries. When he is bored with dry land, the blocks become separate boats, or a string of barges with a tug. He can go on like this forever.

Sometimes parents with little money to spend feel sad that they can't buy a shiny automobile to pedal or a playhouse. But think what a child can do with a packing box. By turns it's a bed, a house, a truck, a tank, a fort, a dolls' house, a garage. Don't take this idea so seriously that you never get your child a really fine plaything. The time will come when he will want a

three-wheel bike or an express cart with all his heart, and you will want to buy it for him if you can. I only mean that simple things come first. Add the fancier toys as you can afford them, and as you find out what he really enjoys.

The baby in the last half of the first year loves bright-colored objects to handle and rattle and chew, such as the newer plastic toys (small rings on a big ring, for example). There's no paint to come off, and there's no danger from chips, as there is from thin celluloid toys.

Around a year to a year and a half, the child is fascinated with putting one thing into another, and pushing or pulling it around. The block that runs on four wheels and has holes for pegs is a favorite, but a plain box with a string is as good. As a matter of fact, pushing comes before pulling, and that's why the bell on wheels, pushed with a stick, is so popular. Hollow blocks don't interest him as long as pots, pans, strainers, and spoons.

Soft dolls and woolly animals are loved by some children throughout the early years. Others see no sense in them.

As the child gets toward the age of 2, he's more interested in copying. First, it's the immediate things that his mother and father do, like sweeping, washing dishes, and shaving. As he grows beyond 2, his imagination becomes more creative. This is the period for dolls and dolls' furniture, trucks and cars, and, above all, blocks. Blocks piled on top of each other are the Empire State Building, end to end they make a train. They can be laid out on the floor in the outline of a house or boat to sit in, and so on indefinitely. A good-sized bag of blocks is worth ten toys to any child up to 6 or 8.

252. **Let children play at their own level.** A grownup playing with children often is tempted to make the play too complicated. A mother, who has bought her small daughter a doll with a whole wardrobe of clothes, would like to dress the doll just right, beginning with the underclothes. But the little girl may want to start with the red overcoat. A mother buys her small, sick boy a box of crayons and a book of outline pictures to color. He picks up an orange crayon and rubs it back and forth across the page, not trying to keep within the lines, not worrying that he's using orange for sky and grass. It's hard for

a parent not to say, "Oh, no, not like that. See, you do it this way." Or a father, who has never had enough chance to play with trains, produces a whole set for his 3-year-old at Christmas. The father can't wait to get started. He fits the tracks together. But the boy has grabbed one of the cars and has shot it across the room; smack against the wall. "No, no!" says father. "You put the car on the track like this." The child gives the car a push along the track and it falls off at the curve. "*No, no,*" says father. "You have to wind up the engine and let the engine pull the car." But the poor child hasn't the strength to wind up the engine, or the skill to put the cars on the track. He doesn't care about realism yet. After his father has been impatient with him for 15 minutes, he gets a strong dislike for tin trains and wanders off to do something else that he can enjoy.

A child will become interested in dressing dolls properly, coloring carefully, playing trains realistically, each at a certain stage of his development. You can't hurry him. When you try, you only make him feel incompetent. This does more harm than good. Your child will love to have you play with him if you are willing to play at his level. Let *him* show *you* how. Help him if he asks for it. If you've bought him a toy that is too complicated, either let him misuse it in his own way, or tactfully hide it until he's older.

253. **Generosity can't be forced.** When children begin to play around each other at 1½, 2, 2½, they are apt to grab things from each other without much ceremony. The *small* child who has a possession never gives it up to be nice. He either hangs on like grim death, perhaps whacking at the attacker, or he gives it up in bewilderment. Mothers, seeing these goings on, are sometimes horrified.

If your child, around 2, always seems to be the grabber, it doesn't mean that he's going to be a bully. He's too young to have much feeling for others. Let him grab sometimes. If he's doing it constantly, it may help to let him play part of the time with slightly older children who stand up for their rights. If he always intimidates a certain child, better keep them separated for a while. If your child is hurting another, or looks as if he were planning murder, pull him away in a matter-of-fact manner and get him interested in something else. It's better not to

heap shame on him—that only makes him feel abandoned, and more aggressive.

If a child goes on being unusually aggressive when he's 3 or older, and doesn't seem to be learning anything about co-operative play, it's time to look into his adjustment at home. It's in these early, less serious problems that a good children's psychiatrist (either a private doctor or one in a child-guidance clinic) can help a parent and child most easily and most thoroughly (Section 338).

If your child at 2 doesn't give up his possessions, he is behaving normally for this age. He will come around to generosity *very* gradually, as his spirit grows up and as he learns to enjoy and love other children. If you make him give up his treasured cart whenever another child wants it, you will only give him the feeling that the whole world is out to get his things away from him—not just the children but the grownups, too. This will make him *more* possessive, instead of less. When a child is reaching the stage when he's beginning to enjoy playing with others, somewhere around 3, you can help to make a game of sharing. "First Johnny has a turn pulling the cart and Catherine rides in it. Then Catherine pulls the cart and Johnny has a turn to ride in it." This makes sharing fun instead of an unpleasant duty.

If your child is the one who always has things taken away from him, you may be worried that he's a timid soul. The chances are that he isn't meek at all. He's just baffled by something that he hasn't had enough experience with as yet. Nine out of ten children who start out this way, realize what it's all about in a few months and find out how to stand up for their rights. Naturally it's not good for a child in the meantime to be completely browbeaten by an unusually aggressive child. Pick a place for play where there are no bullies. It does the timid child no good to have his mother always fighting his battles for him. He only learns to depend on her.

254. Naughty words. Around 3, children often go through a phase of reveling in bathroom words. They gaily insult each other with expressions like "You great big duty," or "I'll flush you down the toilet," and think they are very witty and bold.

The parent should consider this a normal development, let it go for a while, and then suggest a different occupation.

As they grow older, all normal children who have a chance, as they should, to be around with other children, learn swear words and "dirty" words. Long before they know what the words mean they know that they are "naughty." Being human, they repeat them to show that they are worldly-wise and not afraid to be a little bad. It's usually quite a shock to conscientious parents to hear these words coming from the mouths of their supposedly sweet innocents. What's a good parent to do? It's better not to jump out of your skin, or act horribly shocked. On the timid child this will have too strong an effect; it will worry him, make him afraid to be around with children who use bad words, make him feel "different." But most children who find they have shocked their parents are delighted, at least secretly. Some of them will go on cussing endlessly at home, hoping to get the same rise. Others, stopped at home by threats, use all their bad language elsewhere. The point is that when you tell a child that just by making certain sounds he has the power to scandalize the whole world, it's like handing him a full-sized cannon and telling him, "For goodness' sake, don't pull the trigger." On the other hand, I don't think that you have to sit mute forever and just take it. I'd let a child have a little fun with his bad words, provided they aren't too awful, perhaps even grinning a little to show him that I had my wicked side, too, and then change the subject. Then if it didn't wear off, or if he came to words that would certainly offend, I'd tell him in a matter-of-fact way that lots of people don't like to hear those words at all and that I don't like to hear them all day long.

255. **Children learn to control their own aggressive feelings.** Do you worry when your 2-year-old pulls another's hair, or your 4-year-old plays with a toy pistol? Some proper parents think that these aggressive actions are sinful, and ought to be squelched right away. There's no question that our civilized life couldn't last at all if people didn't learn to control their violent feelings. But parents don't have to worry about this job too much. A normal child learns these controls bit by bit as he develops, through the unfolding of his own nature and the good relationship he has with his parents.

Think of the transformations of the child's aggressive feelings at different age periods. The little baby who is hungry feels furious at the whole world. The one-year-old sometimes slaps at his mother's face when he feels cross. By a year and a half, if he has been treated gently, he's more apt to refrain from attack, but takes out his rage by kicking the floor.

A 2½-year-old, when someone grabs his toy, may bat him over the head with a shovel, without a moment's hesitation. Much more civilized is the 4-year-old. He's likely to argue with the grabber, at least some of the time.

And meanwhile he's been learning to take out his violent feelings in *play* form. First it's very simple. He points his pretend gun and says, "Bang! I'm shooting you dead." He's having fun with the *idea* of killing. But he doesn't need to be scolded or "taught better." He already knows that it's unthinkable to harm friendly people seriously but all right to let off steam pretending. (This is one reason why children love stories of violence.) You can really go a step further, and say that the child who can *play* at hurting and killing is able, as a result, to be more friendly than the child who bottles up his hostile feelings.

As boys get into the 6- to 10-year-old period, their games of make-believe violence are better organized. A crowd that wants to play war divides itself into teams, makes rules of the game. At the high-school and college level, make-believe no longer satisfies. Organized athletics, games, debates, and competitions for school jobs take its place. All these call for aggressiveness. But the fierce feelings are strictly controlled by dozens of rules and conventions.

And when a person goes out into the world and takes a job, he still needs his aggressive instincts, but they are still further refined and civilized. He competes for a better position in the organization. He works to make his business concern the most successful. On a farm he fights the elements and the insects, and competes with other farmers at the county fair.

In other words, when your child at 2 bangs another over the head, or at 4 plays at shooting, or at 9 enjoys blood-and-thunder comic books, he is just passing through the necessary stages in the taming of his aggressive instincts that will make him a worth-while citizen. Let him be his age all along the way.

256. **Biting humans.** It's natural for a baby around one year to take a bite out of his parent's cheek. His teething makes him want to bite anyway, and when he feels tired he's even more in the mood for it. I don't think it means much, either, when a child between 1 and 2 bites another child, whether it's in a friendly or angry spirit.

After 2 or 2½ it depends on how often the biting occurs and how the child is getting along otherwise. If he is generally happy and outgoing but occasionally takes a bite when he gets in a fight, it's of no great importance. But if, on the other hand, he is tense or unhappy much of the time and keeps biting other children for no good reason, it's a sign that something is wrong. Perhaps he is being bossed and disciplined too much at home and is in a frantic, high-strung state. Perhaps he has had too little chance to get used to other children previously and imagines they are dangerous and threatening to him. Perhaps he is jealous of a baby at home and carries over the fear and resentment to all other small children, as if they were competitors, too. If the cause and the cure are not easy to see, a children's psychiatrist will be able to help (Section 338).

Some mothers who have been bitten ask if they should bite back. A mother can control her child better by staying in charge, as a friendly boss, than by descending to his age level to battle with bites, slaps, or shouts. Besides, when you bite or slap a one-year-old he's apt to keep it up, either as a fight or a game. And if you just look reproachful you bring out his meanness. The only thing you need to do is to keep from being bitten again, by drawing back when he gets that gleam in his eye.

257. **A boy needs a friendly, accepting father.** Boys and girls need chances to be around with their father, to be enjoyed by him, and, if possible, to do things with him. Unfortunately, the father is apt to come home wanting most of all to slump down and read the paper. If he understands how valuable his companionship is, he will feel more like making a reasonable effort. I say reasonable because I don't think the conscientious father (or mother either), should force himself beyond his endurance. Better to play for 15 minutes enjoyably, and then say, "Now I'm going to read my paper," than to spend all day at the zoo, crossly.

Sometimes a father is so eager to have his son turn out perfect that it gets in the way of their having a good time together. The man who is anxious that his son become an athlete may take him out at an early age to play catch. Naturally, every throw, every catch has its faults. If the father keeps criticizing, even in a friendly tone, the boy becomes uncomfortable inside. It isn't any fun. It also gives him the feeling of being no good, in his father's eyes and in his own. A boy will come around to an interest in sports in good time, if he's naturally self-confident and outgoing. Feeling approved of by his father will help him more than being coached by him. A game of catch is fine if it's the son's idea, and if it's for fun.

A boy doesn't grow spiritually to be a man just because he's born with a male body. The thing that makes him feel and act like a man is being able to copy, to pattern himself after men and older boys with whom he feels friendly. He can't pattern himself after a person unless he feels that this person likes him and approves of him. If a father is always impatient or irritated with his son, the boy is likely to feel uncomfortable not only when he's around his father but when he's around other men and boys, too. He is apt to draw closer to his mother and take on her manners and interests.

So a father who wants to help his small son grow up manly shouldn't jump on him too hard when he cries, scorn him when he's playing a girlish game, or force him to practice athletics. His cue is to enjoy him when he's around, give him the feeling he's a chip off the old block, share a secret with him, take him alone on excursions sometimes.

The boy who hasn't got a father, temporarily or permanently is discussed in Section 491.

258. **A girl needs a friendly father, too.** It's easy to see that a boy needs a father to pattern himself after, but many people don't realize that a friendly father plays a different but equally important part in the development of a girl. She won't exactly pattern herself after him, but she gains confidence in herself as a girl and a woman from feeling his approval. I'm thinking of little things like approving of her dress, or hair-do, or the cookies she's made. When she is older, he can show her that he's interested in her opinions and let her in on some of his.

Later, when she has boy friends, it's important for him to welcome them, even if he secretly doesn't think they are quite good enough for her.

She, by learning to enjoy the qualities in him that are particularly masculine, is getting ready for her adult life in a world that is half made up of men. The way she makes friendships with boys and men later, the kind of man she eventually falls in love with, the kind of married life she makes, will all be influenced strongly by the kind of relationship she has with her father throughout her childhood.

259. Helping a first child to be outgoing. Most first children grow up happy and well adjusted like most second and third and fourth children in a family. But a few of them have a harder time adjusting to the outside world.

A mother is apt to say, "The second baby is so easy. He doesn't cry. He is never a problem. He plays contentedly by himself, and yet he is so friendly if you go near him." When he's several years older, the mother says, "The second is such a friendly, outgoing child that everybody just naturally loves him. When we're walking down the street, strangers smile at him and stop us to ask how old he is. They only notice the older one afterwards, to be polite. You can see that it hurts the older one's feelings. He craves attention much more than the second."

What makes the difference? One trouble is that the first baby in some families gets more fussing over than is good for him, especially after the age of 6 months, when he begins to be able to amuse himself. The parents may be noticing him, suggesting things to him, picking him up, more than is necessary. This gives him too little chance to develop his own interests. He too seldom makes the first greeting, because the parents are speaking to him first. He may be shown off to other grownups too much. A little of this is harmless; a steady diet of it makes him self-conscious. When the first child is sick, the parents naturally hang over his bed with more concern and anxiety than they will after they have had longer experience. When he is naughty, they are more apt to take it seriously and to make a fuss about it.

A steady flow of fussy attention toward a child tends to spoil him somewhat for the outside world in two ways. He grows up

assuming that he is the hub of the universe and that everyone should automatically admire him whether he is being attractive or not. On the other hand, he hasn't been practicing how to make his own fun or how to be outgoing and appealing to people.

Of course, the answer is not to ignore a first child. He needs affection and responsiveness in good measure. But let him play his own games as long as he is interested and happy, with the least possible interference, bossing, scolding, and anxious concern. Give him a chance to start the conversation sometimes. When visitors come, let him make up to them himself. When he comes to you for play or for affection, be warm and friendly, but let him go when he turns back to his own pursuits.

Another factor that sometimes seems to make a first child unsociable is too serious an attitude on the parents' part. It isn't that the parents are grim people; they can be easygoing with their friends and their later children. They are just trying too hard with the first.

You will know what I mean if you have ever seen a tense person trying to ride a horse for the first time. He sits stiff as a china doll, doesn't know how to accommodate to the horse's movements, and is apt to be unnecessarily bossy. It's hard work for the horse and the rider. The experienced rider knows how to relax, how to give in and conform to some of the horse's motions without losing his seat, how to direct the horse gently. Bringing up a child isn't much like riding a horse, but the same spirit works in both jobs.

A similar example is the young officer or executive who is put in charge of other people for the first time. If he isn't too sure of himself, he may be unnecessarily solemn and strict in the beginning, for fear he won't keep control. The more experienced person isn't afraid to be friendly and reasonable.

You may say, "The trouble is that I *am* inexperienced." But you don't have to have had experience to do a wonderful job with a baby—all you need to start with is a friendly spirit. A child won't throw you the way a horse might (at least not until he's much older), and he won't laugh at you the way a squad of men might. Don't be afraid to relax, to be agreeable. Better too easygoing than too stiff.

260. Comforting a hurt child. When a child is hurt he wants to be comforted, and his parent feels like comforting him—it's natural and right.

Sometimes a parent who is particularly concerned that his child grow up brave and uncomplaining fears that comforting him will make him a sissy. But a secure child isn't made dependent by ordinary comforting. As he grows older, especially as he gets into the period beyond 6 years, he will make a great effort all by himself to be brave and not to run to his mother.

The child who is crybaby over small hurts and aches has had a more complicated past. He may have been made *generally* dependent by all kinds of fussing and overprotection. Sometimes the mother is a person who, without realizing it, has a rather severe, critical attitude toward him at most times but shows her tender side mainly when he is hurt or ill. Her cue here is not to be more severe when he's in trouble but to show that she enjoys and loves him when he's all right. In another case a parent may have an exaggerated horror of injuries, and the child catches some of this anxiety.

You don't need to be afraid to comfort your child while he is miserable. Merely avoid emphasizing the injury, and distract him back to his regular activities as soon as he is able.

GOING TO BED

261. Keeping bedtime happy. There are three or four factors that make a lot of difference between the child who goes to bed willingly and the one who stalls and argues.

Keep bedtime agreeable and happy. Remember that it is delicious and inviting to the tired child, if you don't turn it into an unpleasant duty. Have an air of cheerful certainty about it. Expect him to turn in at the hour you decide as surely as you expect him to breathe. It's good for a child to be able to persuade his mother (or father) to change her mind once in a while about bedtime (Fourth of July, for instance). But bedtime comes too often for regular argument. It usually works best to have the nap come right after lunch, before he has had time to become absorbed in play. The relation between supper and bedtime is usually more complicated because of the bath, the father's coming home.

Until the child is at least 3 or 4, and in any case until he is responsible enough to like to get himself to bed, lead him rather than push him with words. Carry the very small child to bed affectionately. With a 3- or 4-year-old, lead him by the hand, both of you still chatting about what was last on his mind.

Small children are comforted by having a certain amount of ritual, about going to bed. For example, the dolly is put in her bed and tucked in. Then the teddy bear is put in the child's bed. Then the child is tucked in and kissed. Then the mother pulls down the shade or puts out the light. Try not to rush going to bed, no matter how much of a hurry you are in. Keep it peaceful. Tell or read a story regularly if you have time. It shouldn't be scary. Most children are helped in going to bed by having a cozy toy animal or doll for company in bed.

262. **Taking things to bed.** Is there any harm letting a child get used to taking a cozy toy like a woolly animal to bed with him? Definitely not. If a toy gives him a sense of comfort and companionship, it's good for him. Human beings are born sociable. In civilizations that are simpler than ours children and grown-ups too go to sleep curled up together. It's not surprising that a child, particularly an only one, should feel a little lonesome going to sleep in a room by himself. If he can breathe life into a stuffed doll or animal, so much the better. Don't worry if the toy gets dirty or ragged. You can have it washed or cleaned, but don't dispose of it for hygienic reasons.

The same goes for a special woolly blanket, an old bed pad, a gray tattered diaper, or any of the odds and ends that a small child may become attached to. The only problem comes when the beloved object finally crumbles to dust. Sometimes a child is willing to let bygones be bygones when this happens. But if he wants to shift his devotion to a new object, don't try to discourage it. He will outgrow the need eventually, at his own rate. What about hard toys? Parents sometimes fear that a child will hurt himself or disturb his sleep by rolling onto these. You don't need to worry. Children can sleep peacefully in a bed piled high with prize possessions.

263. **How much sleep does a child need, anyway?** You can usually trust an infant to take what rest he needs. By the time a child is 2 or more, you can't leave it all to him to decide.

He may need more sleep but be kept from getting it by tenseness of different kinds: loneliness, fear of being left alone, fear of the dark, fear of nightmares, fear of wetting his bed, excitement from stimulating experiences. He may be all keyed up



from competing with an older brother, or "burned up" with jealousy of a younger sister. He may be on edge each evening, because there is always a tug of war with his mother about when he is to go to bed, or because he is worrying about his schoolwork or the radio thriller he has been listening to. The prevention of these various troubles is discussed elsewhere. I only bring them up here to point out at the start that you can't say that the child doesn't need more sleep just because he won't take it.

The average 2-year-old needs 12 hours sleep at night and 1 to 2 hours of nap. The nap or rest usually shortens as he grows from 2 to 6, and bedtime at night stays the same. (I would go on with a short rest *after* the age of 6 if his school hours permit and if it does him good.) Between the ages of 6 and 9, the average child can usually give up an hour of his night's sleep, half an hour at a time, and, for instance, go to bed at eight if he's getting up at seven. By the age of 12, he will probably have been able to clip off two more half hours and go to bed at nine. These are average figures. Some children will need more, others less.

Many children will stop going to sleep at naptime around the age of 3 or 4, but practically all of them still need a real rest after lunch until they are 5 or 6. Many wise schools provide a rest period through the sixth grade. It all depends on the individual child's temperament and activity. If he gets overtired without a rest, he needs one whether he is young or old.

264. The small child who won't stay in bed at night. In the period between 2 and 3 years, a child may hop out of bed and come out of his room just after he has been put to bed. He says he wants a drink of water or that he wants to go to the bathroom again (even though he did both just a minute ago). He's apt to put on his most friendly and innocent manner. He may come out a dozen times, but no matter how cross his parents become, he keeps acting as if it were the most natural thing in the world.

The principal cause seems to be loneliness. The child around 2 is apt to be quite dependent on his parents' company. The problem comes up most often with the first child in the family. He has been close to his parents. He has no other children to go to bed with. If the mother or father have recently gone away from home, it makes him more anxious to keep track of them.

To prevent this kind of problem, it's important to have bedtime peaceful and, if possible, let the child have a chance to play with his father beforehand. If he gets out of bed, don't be really angry with him; this will only increase the uneasiness which is what is making him come out anyway. It works best to take him back promptly, firmly. Sometimes it helps to get him thoroughly tired out in the afternoon, but a child can be exhausted and still keep himself awake for hours if he's worried. In any case, be sure that he has a rich, satisfying, outgoing kind of life in the daytime, with plenty of children and occupations.

I would advise against locking such a child in his room. In some cases it leads to real terror and prolongs the insecurity. Leave a dim light on in his room or the next room, if that makes him feel safer. If he seems really frightened, see Section 288.

DUTIES

265. Let him enjoy his duties. How does a child learn to perform various duties? By his very nature he starts out feeling that dressing himself, brushing his teeth, sweeping, putting

things away, are exciting and grown-up things to do. If his parents succeed in keeping on good terms with him as he grows older, he will enjoy going on errands, carrying wood, beating rugs, because he still wants to have a part in important jobs and to please his mother and father. Most of us (including the author) aren't able to bring up our children so well that we get co-operation all the time, but if we realize that children prefer to be helpful, we are less likely to make household tasks sound like unpleasant duties or to assign them when we're irritable.

266. **Dressing himself.** Between the ages of 1 and 1½ years a child begins to try to undress himself. (He pulls the toe of his sock directly toward his stomach which makes it stick.) By about 2 he can do a pretty good job of stripping himself. Now he tries hard to put on his clothes, but gets all tangled up. It will probably take him another year to learn to put the easier garments on right, and another year still (at about 4) to be able to handle the trickier jobs like laces and buttons.

This period from 1½ to 4 years requires a lot of tact. If you don't let him do the parts he is able to, or interfere too much, it's apt to make him angry. If he never has a chance to learn at the age when it appeals to him, he may lose the desire. Yet if you don't help him at all, he'll never be dressed, and he may get frustrated at his own failure. You can help him tactfully in the jobs that are possible. Pull the socks part way off so that the rest is easy. Lay out the garment that he's going to want to put on, so that he'll start straight. Interest him in the easier jobs while you do the hard ones. When he gets tangled up, don't insist on taking over yourself, but straighten him out so that he can carry on. If he feels that you are with him and not against him, he'll be much more co-operative. It takes patience, though.

267. **Putting things away.** When your child is very young and you still expect to pick up and put things away after he is through playing, you can do it as part of the game, with enthusiasm. "The square blocks go here, in big piles, and the long blocks go there. Over here let's pretend there's a garage, and all the cars go here to sleep at night." By the time he is 4 or 5 he has fallen into the habit of putting things away and enjoying it. Many times he will do it himself without any reminder. But if he still needs help at times, join in sociably.

If you say to a 3-year-old, "Now put your things away," it sounds unpleasant. Even if he enjoys doing it, you are handing him a job that practically no 3-year-old has the perseverance to carry through. Furthermore, he's still at a very balky age.

Cheerfully helping a child to put things away not only develops a good attitude in him but it's really easier for the mother than long arguments.

268. **Dawdling.** If you have ever seen a mother trying to get a dawdling child off to school, urging him, warning him, scolding him—to get out of bed, to get washed, to get dressed, to eat his breakfast—you will vow that you will never get in that fix. The dawdling child isn't born that way. He's made that way gradually, in most cases, by constant pushing. "Hurry up and finish your lunch." "How many times do I have to tell you to get ready for bed?" It's easy to fall into the habit of prodding children, and it builds up an absent-minded balkiness in them. Parents say they have to nag, or the child wouldn't get anywhere. It's a vicious circle, but the parents start it.

In the early years, before a child is capable of carrying out directions, lead him through his various routines. As he gets old enough to want to take over responsibilities, step out of the picture as fast as you can. When he slips back and forgets, lead him again. When he goes to school, let him think of it as his job to get there on time. It may be better to quietly allow him to be late to school once or twice, or to miss the bus and school altogether and find out for himself how sorry he feels. A child hates to miss things even more than his mother hates to have him. That's the best mainspring to move him along.

You may have the impression that I think a child should not be held to any obligation. On the contrary, I think he should sit down at table when a meal is ready and go to bed at the proper time. I'm only making the point that if he's led, not pushed too much, he'll usually want to do these things himself.

269. **Let him get dirty.** A small child wants to do a lot of things that get him dirty, and they are good for him, too. He loves to dig in earth and sand, wade in mud puddles, splash in water in the washstand. He wants to roll in the grass, squeeze mud in his hand. When he has chances to do these delightful things, it enriches his spirit, makes him a warmer person, just

the way beautiful music or falling in love improves an adult.

The small child who is always sternly warned against getting his clothes dirty or making a mess, and who takes it to heart, will be cramped. If he becomes really timid about dirt, it will make him too cautious in other ways, also, and keep him from developing into the free, warm, life-loving person he was meant to be.

I don't mean to give the impression that you must always hold yourself back and let your child make any kind of mess that strikes his fancy. But when you do have to stop him, don't try to scare him or disgust him, just substitute something else a little more practical. If he wants to make mud pies when he has his Sunday clothes on, have him change into old clothes first. If he gets hold of an old brush and wants to paint the house, set him to work (with a pail of water for "paint") on the woodshed or the tiled floor of the bathroom.

270. **Good manners come naturally.** Teaching a child to say "How d'do" or "Thank you" is really the least important step. The first step is to have him like people. If he doesn't, it's hard to teach him even surface "manners."

The second step is to avoid making him self-conscious with strangers. We're apt, especially with our first child, to introduce him right away to a new grownup and make him say something. But when you do that to a 2-year-old, you get him all embarrassed. He learns to feel uncomfortable just as soon as he sees you greeting somebody, because he knows he's about to be put on the spot. It's much better in the first 3 or 4 years, when a child needs time to size a stranger up, to draw the newcomer's conversation *away* from him, not *toward* him. A child of 3 or 4 is likely to watch a stranger talking to his mother for a few minutes and then suddenly break into the conversation with a remark like, "The water came out of the toilet all over the floor." This isn't Lord Chesterfield's kind of manners, but it's real manners, because he feels like sharing a fascinating experience. If that spirit toward strangers keeps up, he'll learn how to be friendly in a more conventional way soon enough.

The third, and probably most important, step is for a child to grow up in a family that is considerate of each other. Then he absorbs kindliness. He wants to say "Thank you" because the

rest of the family say it and mean it. He enjoys tipping his hat to a lady when his father does, because he craves being like his father.

It isn't wrong to tell a child how to be polite. I only mean that feelings toward people come first, that good manners then come naturally, and that pushing party politeness too early and too hard works in the wrong direction.

When you coach a child about manners, try to do it when you're alone with him rather than in the embarrassing presence of outsiders.

DISCIPLINE

271. Don't say, "Do you want to"—just do what's necessary. It's easy to fall into the habit of saying to a small child, "Do you want to get in your high chair and have your lunch?" "Shall we get dressed now?" "Do you want to do wee wee?" The trouble is that the natural response of the child, particularly between 1 and 3 is "No." Then the poor mother has to persuade him to give in to something that was necessary anyway. The arguments use up thousands of words. It is better not to give him a choice. When it's time for lunch, lead him or carry him to the table, still chatting with him about the thing that was on his mind before. When you see signs that he needs to go to the bathroom, lead him there or bring the potty chair to him. Start undoing him without even mentioning what you're up to.

You might get the idea that I am advising you to swoop down on him and give him the "bum's rush." I don't mean exactly that. In fact, every time you take a child away from something he's absorbed in, it helps to be tactful. If your 15-month-old is busy fitting one hollow block inside another at suppertime, you can carry him to the table still holding his blocks and take them away when you hand him his spoon. If your 2-year-old is playing with a toy dog at bedtime, you can say, "Let's put doggie to bed now." If your 3-year-old is chugging a toy automobile along the floor when it's time for the bath, you can suggest that the car make a long, long trip to the bathroom. When you show interest in what he's doing, it puts him in a co-operative mood.

As your child grows older, he'll be less distractible, have more concentration. Then it works better to give him a little friendly

warning. If a 4-year-old has spent half an hour building a battleship of blocks, you can say, "Put the guns on soon now. I want to see them shooting before you go to bed." This works better than pouncing on him without warning when the most exciting part of the play is still to come, or giving him a cross warning as if you never did see anything in battleships except the mess they made on the floor.

272. **Don't give the small child too many reasons.** You sometimes see a child between the ages of 1 and 3 who becomes worried by too many warnings. The mother of a certain boy 2 years old always tries to control him with ideas. "Jackie, you mustn't touch the doctor's lamp, because you will break it, and then the doctor won't be able to see." Jackie regards the lamp with a worried expression and mutters, "Doctor can't see." A minute later he is trying to open the door to the street. His mother warns him, "Don't go out the door. Jackie might get lost and Mummie couldn't find him." Poor Jackie turns this new danger over in his mind and repeats, "Mummie can't find him." It's bad for him to be hearing about so many bad endings. It builds up a morbid imagination. A 2-year-old baby shouldn't be worrying about the consequences of his actions. This is the period when he is meant to learn by doing and having things happen. I'm not advising that you never warn your child in words, but only that you shouldn't be leading him out beyond his depth with *ideas*.

When your child is young, rely most heavily on physically removing him from dangerous or forbidden situations, by distracting him to something interesting but harmless. As he grows older and learns the lesson, remind him by a matter-of-fact "no, no," and more distraction. If he wants an explanation or a reason, give it to him in simple terms. But don't assume that he wants an explanation for every direction you give. He knows inside that he is inexperienced. He counts on you to keep him out of danger. It makes him feel safe to have you guiding him, provided you do it tactfully and not too much.

I think of an overconscientious mother who felt she should give her 3-year-old a reasonable explanation of *everything*. When it was time to get ready to go outdoors, it never occurred to her to put the child's clothes on in a matter-of-fact way and

get out. She would begin, "Shall we put your coat on now?" "No," says the child. "Oh, but we want to get out and get some nice fresh air." He is used to the fact that she feels obliged to give a reason for everything and this encourages him to make her argue for every point. So he says, "Why?" but not because he really wants to know. "Fresh air makes you strong and healthy so that you won't get sick." "Why?" says he. And so on and so forth, all day long. This kind of meaningless argument and explanation doesn't make him a more co-operative child or give him respect for his mother as a reasonable person. He would be happier and get more security from her if she had an air of self-confidence and steered him in a friendly, automatic way through the routines of the day.

273. **Temper tantrums.** Almost any baby will have a few temper tantrums between 1 and 3 years. He's gotten a sense of his own desires and individuality. When he's thwarted he knows it, and feels angry. Yet he doesn't usually attack the parent who has interfered with him. Perhaps the grownup is too important and too big. Also, his fighting instinct isn't very well developed yet.

When the feeling of fury boils up in him, he can't think of anything better to do than take it out on the floor and himself. He flops down, yelling, and pounds with his hands and feet and maybe his head.

A temper tantrum once in a while doesn't mean anything; there are bound to be some frustrations. If they are happening regularly, several times a day, it may mean that the child is getting overtired, or isn't eating enough, or has some chronic physical trouble. Frequent tantrums are more often due to the fact that the mother hasn't learned the knack of handling the child tactfully. There are several questions to ask. Does he have plenty of chance to play freely outdoors in a place where his mother doesn't have to keep chasing him, and are there things for him to push and pull and climb on there? Indoors, has he enough toys and household objects to play with, and is the house arranged so that his mother doesn't have to keep forbidding him to touch many things? Is she, without realizing it, arousing his balkiness by *telling* him to come and get his shirt on, instead of slipping it on without comment, *asking* him if he

wants to go to the bathroom, instead of leading him there or bringing the potty to him? When she sees she has to interrupt his play to go indoors or to meals, does she frustrate him, or get his mind on something pleasant? When she sees a storm brewing, does she meet it head on, grimly, or does she distract him to something else?

You can't dodge all temper tantrums. A mother would be unnatural if she had that much patience and tact. When the storm breaks, you try to take it casually and help to get it over. You certainly don't give in and meekly let the child have his way, otherwise he'd be throwing tantrums all the time on purpose. You don't argue with him, because he's in no mood to see the error of his ways. Getting angry yourself only forces him to keep up his end of the row. Give him a graceful way out. One child cools off quickest if the parent fades away and goes about her own business, matter-of-factly, as if she couldn't be bothered. Another with more determination and pride will stick to his yelling and thrashing for an hour unless his mother makes a friendly gesture. She might pop in with a suggestion of something fun to do, and a hug to show she wants to make up, as soon as the worst of the storm has passed.

It's embarrassing to have a child put on a tantrum on a busy sidewalk. Pick him up, with a grin if you can force it, and lug him off to a quiet spot where you can both cool off in private.

274. **You can be both firm and friendly.** It's probably a good idea, after I have been emphasizing how you handle a young child by distraction and consideration, to point out that there are limits. Some gentle, unselfish parents devote so much effort to being tactful and generous to a child, that they give him the feeling that he's the crown prince, or rather the king. They speak to him sweetly no matter how disagreeable he is or how unreasonable his demands. This isn't good for him or for them. He needs to feel that his mother and father, however agreeable, still have their own rights, know how to be firm, won't let him be unreasonable or rude. He likes them better that way. It trains him from the beginning to get along reasonably with other people. The spoiled child is not a happy creature even in his own home. Then, when he gets out into the world, whether it's at 2 or 4 or 6, he is in for a rude shock. He finds that nobody is will-

ing to kowtow to him; in fact, everybody dislikes him for his selfishness. Either he must go through life being unpopular, or learn the hard way how to be agreeable.

Conscientious parents often let a child take advantage of them for a while—until their patience is exhausted—and then turn on him crossly. But neither of these stages is really necessary. If parents have a healthy self-respect, they can stand up for themselves while they are still feeling friendly. For instance, if your child is insisting that you continue to play a game after you are exhausted, don't be afraid to say cheerfully but definitely, "I'm all tired out. I'm going to read a book now and you can read *your* book, too."

If he is being very balky about getting out of the express wagon of another child who has to take it home now, though you have tried to interest him in something else, don't feel that you must go on being sweetly reasonable forever. Lift him out, even if he yells for a minute.

275. **Punishment.** Is punishment necessary? Most parents decide it is, at one time or another. But that doesn't prove that children themselves *need* a certain amount of punishment, the way they need milk and cod-liver oil, to grow up right.

What makes a child learn table manners? Not scolding—that would take a hundred years—but the fact that he wants to handle a fork and knife the way he sees others doing it. What makes him stop grabbing toys from other children as he grows older? Not the slaps that he might get from the other child or his parent. (I've seen boys and girls who were slapped regularly for years, and still grabbed.) The thing that changes him is learning to love his regular playmates and discovering the fun of playing *with* them. What makes him considerate and polite with his parents? Not the fear that they will punish him if he's rude, but the loving and respecting feeling he has for them. What keeps him from lying and stealing? Not the fear of the consequences. There are a few children, and adults, too, who go right on lying and stealing in spite of repeated and severe punishment. The thing that keeps us all from doing "bad" things to each other is the feelings we have of liking people and wanting them to like us.

In other words, if a child is handled in a friendly way, he

wants to do the right thing, the grown-up thing, most of the time. When he occasionally goes wrong in his early years, he is best straightened out by such methods as distracting, guiding, or even removing him bodily. As he grows older, his parents at times have to explain firmly why he must do this, not do that. If they are sure in their own minds how they expect him to behave, and tell him reasonably, not too irritably, they will have all the control over him that they need. It's not that he'll *always* obey perfectly, but that's not necessary.

Then where does punishment fit in? People who have specialized in child care feel that it is seldom required. A first-rate nursery school teacher can guide eight small children through a day's session without punishing. A good camp councilor can do the same thing with a group of older boys, and most parents realize that when they themselves are most happy and reasonable they need to use punishment least.

But no parent (or non-parent, either) is always happy and reasonable. We all have our troubles, great or small, and we all take them out on our children to some degree. Come to think of it, it wouldn't be good training for a child to be brought up by perfect parents, because it would unsuit him for this world.

But even if we admit that we don't always do a good job of leading our children, and that we turn to punishment instead, that doesn't mean that punishment can be highly recommended. I don't think an agreeable parent should feel ashamed or a failure because he gets cross and uses punishment occasionally. But I disagree with the grim or irritable parent who seriously believes that punishment is a good regular method of controlling a child. The best I can do is explain why one punishment seems less desirable than another.

The best test of a punishment is whether it accomplishes what you are after, without having other serious effects. If it makes a child furious, defiant, and worse behaved than before, then it certainly is missing fire and doing more harm than good. If a punishment seems to break a child's heart or have a tendency to break his spirit, then it's probably too strong for him.

There are times when a child breaks a plate or rips his clothes through accident or carelessness. If he gets along well with his parents, he will feel just as unhappy as they do, and no pun-

ishment is needed. (In fact, you sometimes have to comfort him.) Jumping on a child who feels sorry already sometimes banishes his remorse, and makes him argue.

If you're dealing with an older child who is always fooling with the dishes and breaking them, it may be fair to make him buy replacements from his allowance. A child beyond the age of 6 is developing a sense of justice and sees the fairness of reasonable penalties. However, I'd go light on the legalistic, "take-the-consequences" kind of punishment before 6, and I wouldn't try to use it at all before the age of 3. You don't want a small child to develop a heavy sense of guilt. The job of a parent is to keep him from getting into trouble, rather than act as a severe judge after it's happened.

In the olden days children were spanked plenty, and nobody thought much about it. Then a reaction set in, and parents were taught that it was shameful. But that didn't settle everything. If an angry parent keeps himself from spanking, he may show his irritation in other ways, for instance, by nagging the child for half the day, or trying to make him feel deeply guilty. I'm not advocating spanking, but I think it is less poisonous than lengthy disapproval, because it clears the air, for parent and child. You sometimes hear it recommended that you never spank a child in anger but wait until you have cooled off. That seems unnatural. It takes a pretty grim parent to whip a child when the anger is gone.

I wouldn't advise putting a child in his room for punishment —that makes it seem like a prison. You want him to love his room for play or sleeping.

Avoid threats as much as possible. They tend to weaken discipline. It may sound reasonable to say, "If you don't keep out of the street with your bicycle, I'll take it away." But in a sense a threat is a dare—it admits that the child may disobey. It should impress him more to be firmly told he must keep out of the street, if he knows from experience that his mother means what she says. On the other hand, if you see that you may have to impose a drastic penalty like taking away a beloved bike for a few days, it's better to give fair warning. It certainly is silly, and quickly destroys all a parent's authority, to make threats that aren't ever carried out or that can't be carried out. Scary

threats, such as bogiemen and cops, are 100 per cent wrong in all cases.

If you seem to be needing to punish your child frequently, something is definitely wrong in his life or you are using the wrong methods. You need a wise outsider to help you—a children's psychiatrist (Section 338), or, if that's not possible, perhaps a very understanding and successful teacher.

In general, remember that what makes your child behave well is not threats or punishment but loving you for your agreeableness and respecting you for knowing your rights and his. Stay in control as a friendly leader rather than battle with him at his level.

JEALOUSY

276. **Do your best to avoid jealousy.** Jealousy is a strong emotion, even in grownups, but it is particularly disturbing to the young child before the age of 5. Such traits as selfishness, unfriendliness, self-consciousness can often be traced back to a bitter jealousy created in the small child by the arrival of a baby brother or sister. Jealousy is one of the facts of life and can't be completely prevented in family life. A little jealousy that is gradually conquered may even be constructive. It teaches the individual how to get along in the world outside the family. But the burning jealousy of the small child may do real harm to his personality. To prevent it or to minimize it is worth a lot of effort.

277. **Preparing the way for the baby.** It is good for a child to know ahead of time that he is going to have a baby brother or sister, so that he can get used to the idea gradually. (Don't promise him it's going to be a girl or a boy—children take a promise like that seriously.) The question of where the baby is coming from is discussed more fully in the chapter called "The Facts of Life." Most educators and child psychologists believe that it is wholesome for a child to know that the baby is growing inside his mother, if he is 2 or over.

The arrival of the baby should change a child's life as little as possible, especially if he has been the only child up to that time. It is better to make all possible changes several months ahead of time. If his room is to be given over to the baby, move him

to his new room several months ahead, so that he feels that he is graduating because he is a big boy, not because the baby is pushing him out of his own place. The same applies to graduating to a big bed. If he is to go to nursery school, he should start a couple of months beforehand. Nothing sets a child's mind against nursery school so much as the feeling that he is being banished to it. But if he has previously become well established in nursery school, he will go on liking it, and his satisfying life there keeps him from being as much disturbed by what's going on at home.

How a child gets along while his mother is in the hospital will make a big difference in his feelings toward her and the baby when they come back. Most important is who takes care of him. This is discussed in Sections 287, 488, 489.

278. **When the mother brings the baby home.** It's usually a hectic moment when the mother comes back from the hospital. She is tired and preoccupied. The father scurries about, being helpful. If the older child is there, he stands around feeling troubled and left out. So this is the new baby!

It's better for him to be away on an excursion if this can be arranged. An hour later, when the baby and the nurse and the luggage are all put in their places, and when his mother has at last relaxed on the bed, is time enough for the child to come in. His mother can hug him and talk to him and give him her undivided attention. Let him bring up the subject of the baby when he is ready to.

It helps a child to feel that the baby sister is his, not just in words, but in action. Let him help if he feels like it, in getting her bottle from the icebox, in bringing the towel for her bath. Let him hold her in his lap while he sits on the floor. But all this can be overdone if the mother is talking about his baby sister all day long. He'll have the feeling she is too much of a good thing, even if she *is* his. Don't force her on him.

Most important of all is to play down the new baby in the early weeks. Treat her casually. Don't act excited about her. Don't gloat over her. Don't talk a lot about her. As far as possible, take care of her while the older one is not around. Fit in her bath and most of her feedings when he is outdoors or taking his nap. Most children feel the greatest jealousy when they

see the mother feeding the baby, especially at the breast. If he's around he should be allowed in freely. But if he is downstairs playing happily, don't attract his attention to what's going on.

If he wants to drink from a bottle, too, I'd suggest cheerfully fixing him one. It's a little sad to see an older child trying a bottle, out of envy of the baby. He thinks it's going to be heaven. When he gets up his courage to take a suck, disappointment spreads over his face. It's just milk, coming slowly, with a rubber taste. There's not much risk that he'll want to go back to the bottle for good if his mother gives it to him willingly, and so long as she is doing the other things she can to keep him from feeling jealous.

Relatives play a part in jealousy, too. When the father comes home from work, he should suppress the impulse to ask the child, "How's the baby today?" Better to act as if he had forgotten there was a baby, sit down, and pass the time of day. Later he can drift on to have a look at her when the older one is interested in something else. Aunt Nellie, who used to make a big fuss over the child, can be a problem, too. If she meets him in the front hall with a big package tied up in satin ribbon, and says, "Where's that darling baby sister of yours? I've brought her a present," then his joy at seeing her turns to bitterness. If a mother doesn't know the visitor well enough to coach her how to act, she can have a box of ten-cent-store presents on the shelf and produce one for the child every time a visitor comes with one for the baby.

Playing with dolls may be a great solace to the child, whether he is girl or boy, while his mother is caring for the baby. He will want to warm his doll's bottle just the way his mother does, and have a reasonable facsimile of every piece of clothing and equipment that the mother uses.

279. **Jealousy takes many forms.** If a child picks up a large block and swats the baby with it, the mother knows well enough that it's jealousy. But another child is more polite. He admires the baby for a couple of days without enthusiasm and then says, "Now take her back to the hospital." One child feels all his resentment against his mother, grimly digs the ashes out of the fireplace and sprinkles them over the living-room rug, in a quiet businesslike way. One with a different make-up may become

mopey and dependent, lose his joy in the sand pile and his blocks, follow his mother around, holding onto the edge of her skirt and sucking his thumb. He may wet his bed again at night or even wet and soil in the daytime. Occasionally you see a small child whose jealousy is turned inside out. He becomes preoccupied with the baby sister. When he sees a dog, all he can think of to say is, "Baby likes the dog." When he sees his friends riding bikes he says, "Baby has a bicycle, too." He's bothered all right, but he doesn't admit it, even to himself. This child needs help even more than the one who knows exactly what he resents.



A child usually feels a mixture of love and jealousy of the baby.

A parent sometimes says, "We found that we didn't have to worry about jealousy at all. Johnny is *fond* of the new baby." It is fine when a child shows love for the baby, but this doesn't

mean that jealousy is absent. It may show up in indirect ways, or only in special circumstances. Perhaps he's fond of her indoors, but is rude when strangers admire her on the street. A child may show no rivalry for months until, one day, the baby creeps over to one of his toys and grabs it. Sometimes this change of feeling comes on the day the baby begins to walk.

A mother may be puzzled when she says, "Johnny seems very affectionate with the baby. He hugs her a lot, but he often hugs her so tight that she cries." This isn't really an accident. His feelings are mixed.

It's wise to go on the assumption that there is always some jealousy and some affection, whether it shows on the surface or not. The job is not to squelch the jealousy or to ignore it, but to help the feelings of affection to come out on top.

280. How to handle different kinds of jealousy. When the child attacks the baby, a mother's natural impulse is to shame him. This doesn't work out well for two reasons. He dislikes the baby because he's afraid that his mother is going to love her instead of him. When she threatens not to love him any more, it makes him feel more worried and cruel inside. Shaming also may make him bottle up his feeling of jealousy. Suppressed jealousy will do more harm to his spirit and last longer than if it came out in the open.

There are two jobs: to protect the baby, and reassure the older one that his mother still loves him. When she sees him advancing on the baby with a grim look on his face and a weapon in his hand, she must jump and grab him. But then she can turn the grab into a hug and say, "I know how you feel, sometimes, Johnny. You wish there weren't any baby around here for Mother to take care of. But don't you worry, Mother loves you just the same." If he can feel, at a moment like this, that his mother is still on his side, that she is still thinking of him, it is the best proof that he doesn't need to worry.

As for the child who spreads the ashes around the living room, it would be natural for his mother to feel exasperated and punish him. But if she realizes that he did it from a deep sense of despair and bitterness, she will feel more like reassuring him, and trying to remember what she must have done that he just couldn't take any longer.

The child who turns mopey in his jealousy, being of a more sensitive and inturning nature, needs affection, reassurance, and drawing out, even more than the child who eases his feelings by violence. If he doesn't respond after a while, his mother may want to get a temporary nurse for the baby, even though she had decided beforehand that she couldn't afford it. If it works and helps him get back his old joy in life, it will have a permanent value far beyond the expense involved.



The jealous one needs reassurance more than shaming.

It is worth while consulting a children's psychiatrist about the child who has turned all his jealousy inside and been curdled by it, whether it takes the form of moping or of being obsessed with the baby. The psychiatrist may be able to draw the jealousy back to the surface again, so that the child can realize what's biting him and get it off his chest.

If the jealousy comes out strongly only after the baby is old enough to begin grabbing the older one's toys, it may help a

great deal to give him a room of his own, where he can feel that he and his toys and his buildings are safe from interference. If a separate room is out of the question, his father or a carpenter can build him a big chest or cupboard for his things, with a mighty padlock. This not only protects his toys, but having a key of his own in his pocket and a grown-up lock to open gives him a great sense of being important.

Should he be urged or compelled to share his toys with the baby? Never. Generosity that has any meaning must come from inside, and a person must feel secure and loving first. Forcing a child to share his possessions when he is insecure and selfish makes those traits stronger and more lasting.

Generally speaking, jealousy of the baby is strongest in the child under 5, because he is much more dependent on his parents and has fewer interests outside the family circle. The child of 6 or more is drawing away a little from his parents and building a position for himself among his friends. Being pushed out of the limelight at home doesn't hurt so much. It would be a mistake, though, to think that jealousy doesn't exist in the older child. He too needs consideration and visible signs of love from his mother, particularly in the beginning. The child who is unusually sensitive, or who has not found his place in the outside world, may need just as much protection as the average small child. Even the adolescent girl, with her growing desire to be a woman herself, may be deeply envious of her mother's new motherhood.

There's one caution that I'd like to add here that may sound contradictory. Conscientious parents sometimes worry so much about jealousy, and try so hard to prevent it, that they make the older child less secure rather than more so. They may reach the point where they feel positively guilty about having a new baby, feel ashamed to be caught paying any attention to it, fall all over themselves trying to appease the older child. If a child finds that his parents are uneasy and apologetic toward him, it makes him uneasy, too—inclines him to be more mean to both baby and parents. In other words the parents' cue is to be as tactful as possible to the older child, but not to be worried or apologetic.

281. **Doesn't the new baby need some attention, too?** We have certainly been thinking exclusively about the older child's jealousy of the baby and even talking about ignoring the baby at times for the sake of the other child. The new baby needs attention and affection, too. But in his early days and months he sleeps three quarters of the time, and the minutes of the day when he's ready for fondling are few. This fits in with the needs of the older child. It's in the early days and months that he needs extra attention and demonstrations of affection. If the job is done well in the beginning, he gradually accustoms himself to the baby and loses his alarm. By the time the baby needs his full share of the family's attention, the older child should feel secure enough to permit it.

282. **Jealousy between older children.** There is almost bound to be some jealousy, and if it is not severe it probably helps children to grow up more tolerant and independent.

In a general way, the more agreeably parents get along with children, the less jealousy there will be. When each child is satisfied with the warm affection he receives, he has little reason to begrudge attention to his brothers and sisters.

Basically, the thing that makes each child secure in the family is feeling that his parents love him and accept him for himself, whether he is boy or girl, smart or dull, handsome or homely. If they are comparing him with his brothers or sisters, either openly or in their thoughts, he senses it, feels unhappy inside, resentful toward the other children and the parents.

A harassed mother who is trying hard to treat her jealous boys with perfect justice may say, "Now, Jackie, here is a little red fire engine for you. And, Tommy, here is another, just exactly the same, for you." But each child, instead of being satisfied, suspiciously examines both toys to see if there is any difference. Her remark calls attention to their rivalry. It's as if she said, "I bought this for you so you wouldn't complain that I was favoring your brother," instead of implying, "I bought this for you because I knew you'd like it."

The fewer the comparisons between brothers and sisters the better, whether complimentary or uncomplimentary. Saying to a child, "Why can't you be polite like your sister," makes him dislike his sister, his mother, and the very idea of politeness.

And if you say to an adolescent girl, "Never mind if you don't have dates like Barbara, you're much smarter than she is and that's what counts," it doesn't help her feelings.

It generally works better if a mother keeps out of most of the fights between children who can stand up for themselves. When she concentrates on pinning the blame, it leaves one warrior, at least, feeling more jealous. If at times she has to break up a fight, to save life or to prevent rank injustice or to restore quiet for her own sake, it's better to concentrate on what's to be done next, and let bygones be bygones. In one case she can casually but firmly suggest a compromise, in another case distract them to a new occupation.

The Two-Year-Old

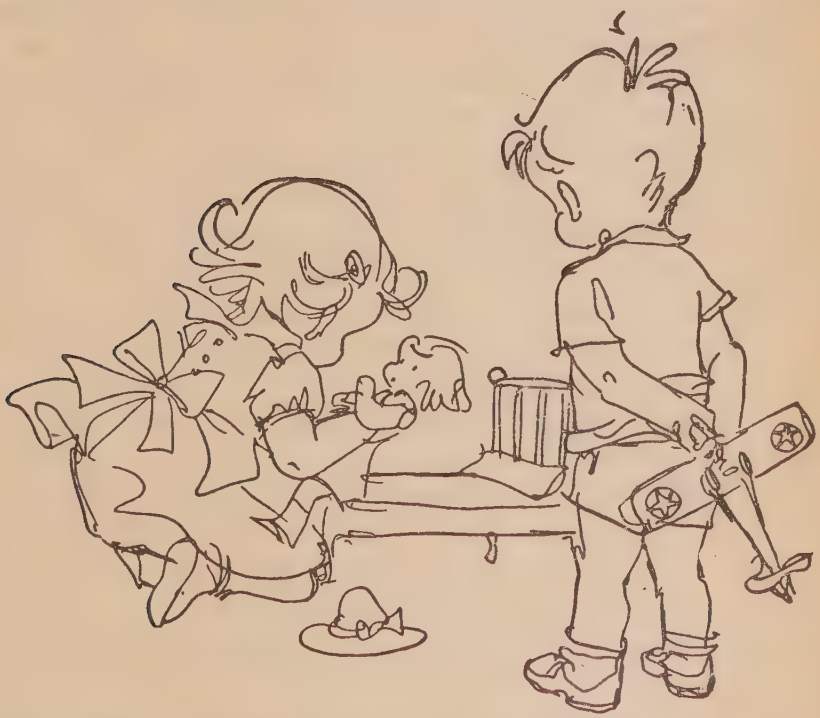
WHAT HE'S LIKE

283. **The two-year-old learns by imitation.** In a doctor's office he solemnly places the stethoscope bell in different spots on his chest. Then he pokes the ear light in his ear, and looks a little puzzled because he can't *see* anything. At home he follows his mother around, sweeping with a broom when she sweeps, dusting with a cloth when she dusts, brushing his teeth when she does. It's all done with great seriousness. He is making giant strides forward in skill and understanding by means of constant imitation.

284. **He may be quite dependent around two.** He seems to realize clearly who it is that gives him his sense of security, and shows it in different ways. A mother complains, "My 2-year-old seems to be turning into a mother's boy. He hangs onto my skirts when we're out of the house. When someone speaks to us, he hides behind me." It's a great age for whining, which, in a way, is a kind of clinging. He may keep climbing out of bed in the evening to rejoin the family, or calling from his room. If he

starts nursery school, he may be timid about being left there by his mother. He's apt to be upset if a parent or maid goes away for a number of days or if the family moves to a new house. It's wise to take his sensitivity into account when changes in the household are being considered.

285. **Two is the age to encourage sociability.** At 2 children don't play much *with* each other, co-operatively. However, they love to watch each other's occupations, and enjoy playing alongside each other. It's worth a lot of trouble to bring a



Playing near and watching come before playing together.

2-year-old every day if possible, or at least several times a week, to where other children are playing. A 2½- or 3-year-old child won't get the hang of sharing, of rough and tumble, unless he's already spent months becoming used to other children.

WORRIES AROUND TWO

286. **Fears of being deserted, and of bed-wetting.** Here's what happens once in a while when the needs of the child of 1¾,

2, 2¼ aren't recognized. A mother decides that she has to go to work, and arranges for a stranger to come in and take care of the child during the day. He makes no fuss the first day, but when his mother comes back that evening, he hangs on to her like a leech and refuses to let the other woman come near. The next morning there is a scene when his mother leaves. That evening he refuses to let her out of his sight, and fights against being put to bed. If she tears herself away, he may cry in fear for hours. If she sits by his crib, he lies down only as long as she sits still. Her slightest move toward the door brings him instantly to his feet.

In some of these cases, there is also worry about urinating. The child keeps saying "wee wee" (or whatever the word he uses). His mother brings him to the bathroom, he does a few drops, and then cries "wee wee" again just as soon as he is back in bed. You might say that he just uses this as an excuse to keep her there. This is true, but there is more to it. These children are really worried that they might wet the bed. They sometimes wake every 2 hours during the night thinking about it. This is the age period when the mother is apt to be showing disapproval when there is an accident. Maybe the child figures that if he wets, his mother won't love him so much, and will therefore be more likely to go away. If so, he has two reasons for fearing to go to sleep.

287. **Avoiding fears at this age.** Children who from infancy have been around different people, and who have been allowed to develop independence and outgoingness, are less likely to develop such fears.

If your child is around 2, be careful about drastic changes. If it's almost as easy to wait 6 months for a trip or to take a job, better wait, especially if it's your first child. If you have to go now, arrange for the child to get thoroughly used to the person who is going to take care of him, whether it's a friend, a relative, a maid, or a foster mother. (If the child is going to be staying at the other person's house, it's even more important for him to get used to the new person and the new place by gradual steps.) Allow 2 weeks anyway. Let the new person just be around the child for a number of days without trying to take care of him, until he trusts and likes her. Then let her take over

gradually. Don't leave him yourself for a full day at first. Start with half an hour and work up. Your quick reappearance will reassure him that you always come back soon. Don't go away for a month or so after you have moved, or after a maid or nurse has left. A child at this age needs a long time to adjust to each of these changes separately.

In Section 488 ("The Working Mother") there is more discussion about what arrangements a mother should make who is going to be away from her child.

288. **How to help a fearful two-year-old.** If your child is already afraid to go to bed, the safest advice, but the hardest to carry out, is to sit by his crib in a relaxed way until he goes to sleep. Don't be in a hurry to sneak away before he is asleep. It will alarm him again and make him more wakeful. This campaign may take weeks, but it should work in the end. If you have chosen someone to care for him who doesn't know how to win his confidence, find someone better right away, no matter how difficult this may be. You can't afford to let the child's security be undermined. If you *have* to go away each day to work, say good-bye affectionately, but cheerfully and confidently. If you have an anguished, unsure-whether-you're-doing-the-right-thing expression, it will add to his uneasiness.

Making the child more tired by keeping him up later or omitting his nap, or having the doctor prescribe a sedative may help a little, but usually won't do the whole job. A panicky child can keep himself awake for hours, even though exhausted. You have to take away his worry, too.

If your baby is worried about wetting, keep reassuring him that it doesn't matter if he does wee wee in his bed—that you'll love him just the same.

I don't want to leave the impression that every 2-year-old child who cries when he is put to bed *must* be sat with until he goes to sleep. There are plenty of children at this age who fuss about going to bed more from loneliness than fear. Try to make bedtime peaceful and happy (Section 261). Then, if the child has to "cry it out" anyway for 5 or 10 minutes, don't worry too much. If a parent takes a matter-of-fact, friendly-but-firm attitude toward routines, it helps him to accept them. I wouldn't let a child who appeared really frightened cry it out.

It sometimes solves the problem of the child who is afraid to go to bed to have either an older or younger brother or sister sleep in his room.

CONTRARINESS

289. Balkiness between two and three. In the period between 2 and 3, children are apt to show signs of balkiness and other inner tensions. Babies begin to be balky and "negativistic" way back when they are 1 year old, so this is nothing new. But it reaches new heights and takes new forms after 2. The 1-year-old contradicts his mother. The 2½-year-old even contradicts himself. (Gesell and Ilg bring this out clearly in their discussion of the 2½-year-old in *Infant and Child in the Culture of Today.*) He has a hard time making up his mind, and then he wants to change it again. He acts like a person who feels he is being bossed too much, even when no one is bothering him. He is quite bossy himself. He is insistent about doing things just so, doing them his own way, doing them exactly as he has always done them before. It makes him furious to have anyone interfere in one of his jobs, or rearrange his possessions.

It looks as though the child's nature between 2 and 3 is urging him to decide things for himself, and to resist pressure from other people. Trying to fight these two battles without much worldly experience seems to get him tightened up inside, especially if his parents are a little too bossy. It's similar to the 6- to 9-year-old period, when the child tries to throw off his dependence on his parents, takes over a lot of responsibility for his own behavior, becomes overfussy about how he does things, and shows his tenseness in various nervous habits.

It's often hard to get along with a child between 2 and 3. Parents have to be understanding. The job is to keep from interfering too much, from hurrying him. Let him help to dress and undress himself when he has the urge. Start his bath early enough so that he has time to dawdle and scrub the tub. At meals let him feed himself without urging. When he is stalled in his eating, let him leave the table. When it's time for bed, or going outdoors, or coming in, steer him while conversing about pleasant things. Get things done without raising issues. Don't be discouraged, there's smoother sailing ahead.

290. The child who can't stand two parents at once. Sometimes a child around 2½ or 3 can get along with either parent alone, but when the other one comes onto the scene, he flies into a rage. It may be partly jealousy, but at an age when he's sensitive about being bossed, and trying to do a little bossing himself, I imagine he feels outnumbered when he has to take on two important people at once. It's more often the father who has to take the abuse at this period, and he sometimes gets the feeling he's pure poison. He shouldn't take it seriously. If he will learn when not to barge in and how to let the child come to him when he feels like it, he can keep the explosions to a minimum. He can feel confident that the child loves him underneath. By 3 or 3½ it will probably all be different.

STUTTERING

291. Stuttering is common between two and three. We don't entirely understand stuttering or stammering, but we know several things about it. It often runs in families, and it's much commoner in boys. This means that it is *easier* for certain individuals to develop it. Trying to change a left-handed child to right-handed sometimes appears to start it. The part of the brain that controls speech is closely connected to the part that controls the hand which a person naturally prefers. If you force him to use his wrong hand, it seems to confuse the nervous machinery for talking.

We know that a child's emotional state has a lot to do with stuttering. Most cases occur in somewhat tense children. Some stutter only when they are excited, or when talking to one particular person. Here are some examples. One little boy began to stutter when a new baby sister was brought home from the hospital. He didn't show his jealousy outwardly. He never tried to hit or pinch her. He just became uneasy. A girl of 2½ began to stutter when the maid who had been with the family a long time left and a new maid took her place. In 2 weeks when she became friendly with her, the stuttering stopped for the time being. When the family moved to a new house she was quite homesick and stuttered again for a period. Two months later the father was called into the Army. The family was upset, and the little girl started again. Mothers report that their children's

stuttering is definitely worse when the mothers themselves are tense. I think children who, during too much of the day, are being talked to and told stories, urged to talk and recite, shown off, are especially liable. Stuttering may start when a father decides to be stricter in his discipline.

Why is stuttering so common in the age period between 2 and 3? There are two possible explanations. This is the age when a child is working very hard at his talking. When he was younger, he used short sentences which he didn't need to think out, "See the car," "Wan'na go out," etc. But when he gets past 2, he's trying to make up longer sentences to express new ideas. He will start a sentence three or four times, only to break off in the middle because he can't find the right words. His mother, worn out by his constant talking, doesn't pay too much attention. She says, "Uh huh," in an absent-minded way while she goes about her own business. So the child is further frustrated by not being able to hold his audience.

It is also possible that the balkiness, which is a part of this rather tense stage of development, affects his speech, too.

292. **What to do for stuttering.** You may be especially distressed if you yourself or some relative has had a lifelong struggle to overcome stuttering. But there is no cause for alarm. I think nine out of ten of the children who start to stutter between 2 and 3 outgrow it in a few months' time if given half a chance. It's only the exceptional case that becomes chronic. Don't try to correct the child's speech or worry about speech training at 2½. Look around to see what might be making him tense. If you think you have been talking at him or urging him to talk too much, try to train yourself out of it. Play with him by *doing* things, instead of by always *talking* things. Is he having plenty of chance to play with other children with whom he gets along easily? Does he have toys and equipment enough, indoors and out, so that he can be inventing his own games without too much bossing? I don't mean that you should ignore or isolate him, but when you're with him be relaxed and let him take the lead. When he talks to you, give him your attention so that he doesn't get frantic. If jealousy is upsetting him, see whether you can do more to prevent it. Stuttering in most cases lasts a number of months with ups and downs. Don't expect it to go right

away, be content with gradual progress. If you can't figure what, if anything, is wrong, talk it over with a children's psychiatrist. A "tongue tie" has nothing to do with stuttering, and should not be cut.

Some schools and hospitals have special speech classes or clinics, where older children can receive special training. This is often helpful, but by no means always. It is most valuable for the child who wants assistance. For the child who is of a distinctly nervous type, it might be better to consult a children's psychiatrist first to discover and remove the causes of the child's tenseness (Section 338).

NAIL-BITING

293. **Nail-biting** is a sign of tenseness. It is more common in relatively high-strung, worrisome children. They start to bite when they are anxious, for instance, while waiting to be called on in school, while watching a scary episode in a movie. It isn't necessarily a serious sign in a generally happy, successful child, but it is always worth thinking over.

Nagging or punishing a nail-biter never stops him for longer than half a minute, because he seldom realizes he is doing it. In the long run, it only increases his tension. Bitter medicine on the nails rarely helps.

The better course is to find out what some of the pressures on the child are and try to relieve them. Is he being urged or corrected or warned or scolded too much? Are the parents expecting too much in the way of household duties or lessons? Consult the teacher about his school adjustment. If movie and radio adventures make him much more jittery than the average child, he'd better be kept away from the worst programs.

The girl beyond the age of 3 may be helped by a manicure set, and perhaps some nail polish, if they are offered in a cooperative spirit.

NURSERY SCHOOL

294. **A good nursery school doesn't take the place of home; it adds to it.** Most children benefit from a good nursery school, though it certainly isn't necessary in every case. It is particu-

larly valuable for the only child, for the child without much chance to play with others, for the child who lives in a small apartment, for the child whose mother finds him difficult to manage for any reason. Every young child by the age of 2 needs other children his own age, not just to have fun with, but to learn how to get along with. This is the most important job in his life. He also needs space to run and shout in, apparatus to climb on, blocks and boxes and boards to build with, trains and dolls to play with. He needs to learn how to get along with other grownups besides his parents. Few children nowadays have all these advantages in their own homes. Nursery school doesn't take the place of home; it just adds to it.

295. **What's the difference between a day nursery and a nursery school?** For many years there have been day nurseries —good, bad, and indifferent—where mothers who had to work could leave their babies and small children. The good ones have been run by people who try to understand children's needs, love them, give them attention, affection, things to play with, freedom to develop. The poor ones have been run by people who think the main job is to discipline children into being good, or who think all a child needs in the way of care is cleanliness and enough food.

The people who started the nursery-school idea said, "*All* small children need a chance to be with other children, not just the ones whose mothers are working. *All* young children need space, music, paints, and clay to enrich their spirits." Furthermore, they said, "It isn't enough that a person who is going to take charge of young children should just love them; she must understand them, too; and that means going to a training school for nursery-school teachers."

But don't get the idea that any place that calls itself a nursery school is wonderful, for some of them are second rate and just use the name because it's popular. And there are a few day nurseries that have kept up with progress and are running excellent nursery schools under the old label. When you are thinking of placing your child in a nursery or nursery school, you want to know: What is the spirit of the teachers toward the children? Almost as important is the question: Have the teachers had real training? Next: How many children to a teacher? (It's hard to

do a good job with more than eight to ten children to a teacher.) Finally: Is there enough play and rest space, indoors and out, enough equipment, toys, blocks, paints, clay, etc.?

You should be able to find out about nursery schools in your neighborhood by consulting the best family social agency in town, or a child-guidance clinic.

296. At what age to start nursery school? Most nursery schools begin with 3-year-olds, and this is a good age to start if your child seems ready for it. Some parents have the idea that the only good the child derives from school is skills like cutting out pictures, and counting. I have heard mothers say "I think I'll wait to put him in nursery school till he is 4 years old when he can get more out of it." This is a mistake. Skills are a very small part of what a good nursery school can give. Learning how to enjoy other children's company, to co-operate, to think up projects and work them out, freedom to romp and dance and sing, are much more important. A child needs these experiences at 3 even more than he needs them at 4. The longer they are postponed, the harder it is to pick them up easily.

Some nursery schools start with 2-year-olds. This may work very well *if* the child is fairly independent and outgoing (many are still quite dependent up to 2½ or 3), *if* the class is small (not more than eight), and *if* the teacher is so warm and understanding that she quickly makes children feel secure.

But a few children are really too young to go to school regularly at 2. I think of those occasional babies who are still very dependent on their mothers, excessively timid with other children and grownups. I don't mean that such children should be kept tied to their mothers' apron strings forever. They need every opportunity to be around where other children play, so that they can become accustomed to them, interested in them, wean themselves from their overdependence. But this takes a little time. You can't solve their problems by prying them away from their mothers before they are half ready. If you are in doubt about your child's readiness for nursery school, talk it over with a good nursery-school teacher.

There are other 2-year-olds who are unready for steady schooling because they have been unusually sickly, or because they easily become exhausted with a group. We have to admit

that a child is apt to have more colds staying indoors with a group of children than if he just played outdoors with one or two regular friends. This is no reason for keeping a robust child out of nursery school, because he can stand a few more colds without any serious harm. All the other benefits from nursery school will more than offset the disadvantage of the colds. It's a different proposition with the frail child whose colds are always severe. As for fatigue, a certain number of children are overstimulated and overtired at the beginning of nursery school in the fall. But in a few weeks *most* of them become adjusted to it and take it in their stride. The child who doesn't get used to it should try a shorter schedule. If that doesn't work, he'd better give up school temporarily.

I have been talking as though one 2-year-old were definitely ready for nursery school, another definitely not. It would be truer to put it this way: If you are considering nursery school for a 2-year-old, you should be ready to be flexible: to take days or weeks, if necessary, to get him used to it by small degrees; to leave him for only part of the daily session for weeks or months if that seems enough; to keep him out of school for a day or a week or a month if life seems to be getting him down (Section 297). If you should decide that he is not ready at 2, that doesn't mean you have to wait until he is 3. He may have changed a lot by 2¼ or 2½.

297. **The first days at school.** The 4-year-old who is outgoing takes to nursery school like a duck to water. He doesn't need any gentle introduction. But the younger the child, the more careful you have to be. The 2-year-old, particularly, is at an age where he still feels closely attached to his mother. If she leaves him at school the first day, he may not make a fuss right away, but after a while he is apt to miss her. When he finds she isn't there, he may become panicky. The next day he may be scared to leave home. Forcing the issue only makes matters worse. It's much better, with the child who is still quite dependent on his mother, to introduce him to school very gradually. For several days she might bring him, stay near by while he plays, and then take him home again. Each day they stay for a longer period. He slowly builds up attachments to the teacher and other children which will give him a sense of secu-

rity when his mother no longer stays. A nursery school should be willing to be very patient in introducing 2-year-olds, and willing to allow the mothers to stay for days if necessary, or it shouldn't take children this young. Sometimes a child seems to be quite happy for several days, even after his mother has left him there, and only then begins to be nervous. In that case, the teacher can help the mother decide whether it is better for her to come back for a number of days. When a mother is staying around in school, she ought to remain in the background. The idea is to let the child develop his *own* desire to enter the group, so that he will forget his need for his mother.

Sometimes the mother's nervousness increases his anxiety. If she says good-bye three times over, with a worried expression, it gives him the idea, "She looks as if something awful might happen if I stay here without her. I'd better not let her go." It's natural for a tenderhearted mother to worry about how her small child will feel when she leaves him for the first time. Let the nursery-school teacher advise you. She's had a lot of experience.

Some children make hard work of nursery school in the early days and weeks. The large group, the new friends, the new things to do, get them keyed up and worn out. If your child is too tired at first, it doesn't mean that he can't adjust to school, but only that you have to compromise for a while until he is used to it. Discuss with his teacher how to cut down his school-time temporarily. In one case, coming to school in the middle of the morning is the best answer. In another, it's more convenient to keep the child at home on Wednesday, for instance, or on Tuesday and Thursday. Taking the easily tired child home before the end of the school day works less well, because he hates to leave in the middle of the fun. The problem of fatigue in the early weeks is further complicated in the all-day school by the fact that a certain number of children are too stimulated to go to sleep at naptime at first. Keeping the child at home one or two days a week may be the answer to this temporary problem, too. Some small children starting nursery school preserve their self-control in school, in spite of fatigue, but let loose on the family when they come home. This calls for extra patience and a discussion with the teacher.

A well-trained nursery-school teacher ought to be, and usually is, a very understanding person. A mother shouldn't hesitate to talk over the child's problems with her, whether they are connected with school or not. A teacher gets a different slant. She has probably faced the same problems before in other cases.

298. **How to get nursery schools.** You may say, "I believe in the importance of my child going to nursery school, but there aren't any in my community." Nursery schools aren't easy to start. Well-trained teachers, plenty of equipment, indoor and outdoor space, are all necessary and all cost money. Good schools are never cheap, because a teacher can only take care satisfactorily of a small number of children. They have most commonly been formed on a private basis, where the parents pay the full expense; or by churches, which bear part of the expense; or by factories, for the benefit of working mothers; or by women's colleges, for the training of students in child care. During the war, the federal and certain local governments contributed. In the long run, a sufficient number of nursery schools will be created, as a part of the public-school system, only if the citizens of the community convince the local government and school authorities that they want them, and vote for candidates for office who pledge themselves to work for them.

Three to Six

IT'S A NICE AGE

299. **Children at this age, being especially devoted to their parents, are easy to lead.** Boys and girls around 3 have reached a stage in their emotional development when they feel that their fathers and mothers are wonderful people. They pay their parents the compliment of wanting to be like them, do what they do, wear what they wear, use the same words. This is what the psychologists call "identifying." It's more than just imitation, it's imitation because of admiration. The 2-year-old girl

who sees her mother sweeping wants to do it, too, but she's mostly thinking of the broom. The 5-year-old girl wants to dress up in her mother's clothes, but she's not thinking as much of the clothes as of looking and feeling like her mother.

A good part of the automatic balkiness, the hostility that was just below the surface in the 2½-year-old period seems to disappear after 3. The feelings toward the parents aren't just friendly; they are warm and tender. However, the child is not so devoted to his parents that he always obeys and behaves perfectly. He is still a real person with ideas of his own. He'll want to assert himself, even if it means going against his parents' wishes at times.

The child's curiosity at this age is intense. He wants to know the meaning of everything that meets his eye. His imagination is rich. He puts two and two together and draws conclusions. He connects everything with himself. When he hears about trains, he wants to know right away, "Will I go on a train someday?" When he hears about an illness, it makes him think, "Will I have that?" Some of the special problems that come up during this phase of development are discussed in the next sections.

300. **A little imagination is a good thing.** When a child of 3 or 4 tells a made-up story, he isn't lying in our grown-up sense. His imagination is vivid to him. He's not sure where the real ends and the unreal begins. That is why he loves stories that are told or read to him. That is why he is scared at the movies.

You don't need to jump on him for making up stories occasionally, or make him feel guilty, or even be concerned yourself, as long as he is outgoing in general and happy with other children. On the other hand, if he is spending a good part of each day telling about imaginary friends or adventures, not as a game, but as if he believed in them, it raises the question whether his real life is satisfying enough. Part of the remedy may be finding him children his own age to play with and helping him to enjoy them. Another question is whether he is having enough easygoing companionship with his parents. A child needs hugging, tussling, and piggyback rides. He needs to share in his parents' jokes and friendly conversations. If the adults around him are undemonstrative, he dreams of comfy, understanding playmates, as the hungry man dreams of choco-

late bars. If the parents are always disapproving, he invents a wicked companion, whom he blames for the naughty things he himself has done or would like to do. If a child is living largely in his imagination and not adjusting well with other children, especially by the age of 4, a psychiatrist should be able to find what he is lacking.

Occasionally, a mother who herself has always lived a great deal in her imagination, and who is delighted to find how imaginative her child is, overfills him with stories, and they both live for hours in fairyland. The games and stories that the other children make up are poor in comparison to hers. He may be weaned away from his interest in real people and things and have a harder time later adjusting to the world. I don't mean that a mother should be afraid of fairy stories or of a little make-believe, but only that it should be in moderation.

301. Why does an older child lie? The older child who tells a lie to deceive is a different problem. The first question is, why does he have to? Everyone, grownup as well as child, gets in a jam occasionally when the only tactful way out is a small lie, and this is no cause for alarm.

A child isn't naturally deceitful. When he lies regularly, it means that he is under too much pressure of some kind. If he is failing in his schoolwork and lying about it, it isn't because he doesn't care. His lying shows that he cares. Is the work too hard for him? Is he confused in his mind by other worries, so that he can't concentrate? Are his parents setting too high standards? The job is to find out what is wrong, with the help of the teacher, or the guidance teacher, or the school psychologist, or a psychiatrist (Section 338). You don't have to pretend that he has pulled the wool over your eyes. You might say, gently, "You don't have to lie to me. Tell me what the trouble is and we'll see what we can do." But he won't be able to tell you the answer right away, because he probably doesn't know it himself. Even if he knows some of his worries, he can't break down all at once. It will take time and understanding.

FEARS AROUND THREE, FOUR, AND FIVE

302. Imaginary worries are common at this age. In earlier sections we discussed how anxieties are different at different

age periods. New types of fears crop up fairly often around the age of 3 or 4—fears of the dark, of dogs, of fire engines, of death, of cripples. The child's imagination has now developed to the stage where he can put himself in other people's shoes and picture dangers that he hasn't actually experienced. His curiosity is pushing out in all directions. He not only wants to know the cause of everything, but what these things have to do with him. He overhears something about dying. Quickly he wants to know what dying is, and as soon as he gets a dim idea he asks, "Do *I* have to die?"

These fears are commoner in children who have been made tense through battles over such matters as feeding and toilet training, children whose imaginations have been overstimulated by scary stories or too many warnings, children who haven't had enough chance to develop their independence and outgoingness. The uneasiness that the child had accumulated before now seems to be crystallized by his new imagination into definite dreads. It sounds as if I meant that any child who develops a fear had been handled badly in the past, but I don't mean to go that far. I think that some children are born more sensitive than others; and all children, no matter how carefully they are brought up, are frightened by something.

If your child develops a fear of the dark, try to reassure him. This is more a matter of your manner than your words. Don't make fun of him, or be impatient with him, or try to argue him out of his fear. If he wants to talk about it, as a few children do, let him. Give him the feeling that you want to understand, but that you are sure nothing bad will happen to him. This is the time for extra hugs and comforting reminders that you love him very much and will always protect him. Naturally you should never threaten a child with bogiemen or policemen or the devil. Avoid movies and cruel fairy stories like the plague. The child is scared enough of his own mental creations. Call off any battle that you might be engaged in about feeding or staying dry at night. Avoid giving him a sense of guilt over minor misbehavior. Threats about not approving of him or not loving him are the hardest of all for him to take when he is already insecure. Arrange to give him a full, outgoing life with other children every day. The more he is absorbed in games and plans, the less he

will worry about his inner fears. Leave his door open at night, if that is what he wants, or leave a dim light on in his room. It's a small price to pay to keep the goblins out of sight. The light, or the conversation from the living room, won't keep him awake as much as his fears will. When his fear subsides, he will be able to stand the dark again.

Realize ahead of time that questions about death are apt to come up at this age. Try to make the first explanation casual, not too scary. You might say, "it's like going to sleep for a long, long time." Don't present it as the end of everything. If you yourself are thinking of death as something not to be dreaded, you will be able to give the same feeling about it to your child. Remember to hug him and smile at him and remind him that you're going to be together for years and years.

A fear of an animal is common at this period, even though the child has had no bad experiences. Don't drag him to a dog to reassure him. The more you pull him, the more you make him feel he has to pull in the opposite direction. As the months go by, he will try himself to get over the fear and approach a dog. He will do it faster by himself than you can ever persuade him. That reminds me of fear of the water. Don't ever pull a child screaming into the ocean or pool. It is true that occasionally a child who is forced in finds that it is fun and loses his fear abruptly, but in more cases it works the opposite way. Remember that the child is longing to go in, even though he has a dread of it. Let him build up his own courage at his own speed.

With fears of dogs and fire engines and policemen and other concrete things, a child may try to get used to his worry and overcome it by playing games about it. This "acting-out" of a fear is a great help if the child is able to. A fear is meant to make us act. Our bodies are flooded with adrenalin, which makes the heart beat faster and supplies sugar for quick energy. We are ready to run like the wind or to fight like wild animals. The running and the fighting burn up the anxiety. Sitting still does nothing to relieve it. If a child with a fear of a dog can play games where he pounds the stuffing out of a toy dog, it partly relieves him. If your child develops an intense fear, or a number of fears, or frequent nightmares, or sleepwalking, you ought to get the help of a children's psychiatrist (Section 338).

303. **Fear of injury.** I'd like to discuss separately the fear of bodily injury in the age period between 2½ and 5, because there are special things you can do to prevent or relieve it. A child at this age wants to know the reason for everything, worries easily, and applies dangers to himself. If he sees a crippled or deformed person, he first wants to know what happened to him, then puts himself in the other's place and wonders if that injury might happen to himself. Children develop these fears not only about real injuries. They even get mixed up and worried about the natural differences between boys and girls. If a boy around the age of 3 sees a girl undressed, it may strike him as queer that she hasn't got a penis like his. He's apt to say, "Where is her wee wee?" Is he doesn't receive a satisfactory answer right away, he may jump to the conclusion that some accident has happened to her. Next comes the anxious thought, "That might happen to me, too." The same misunderstanding may worry the little girl when she first realizes that boys are made differently. First she asks, "What's that?" Then she wants to know anxiously, "Why don't I have one. What happened to it?" That's the way a 3-year-old's mind works. He may be so upset right away that he's afraid to question his mother.

This worry about why boys are shaped different from girls shows up in different ways. I remember a boy just under 3 who kept watching his baby sister being bathed with an anxious expression and telling his mother, "Baby is boo-boo." That was his word for hurt. His mother couldn't make out what he was talking about, until he got bold enough to point. At about the same time he began to hold onto his own penis in a worried way. His mother was unhappy about this and assumed it was the beginning of a bad habit. It never occurred to her that there was a connection between these two developments. I remember a little girl who became worried after she found out about boys and kept trying to undress different children to see how they were made, too. She didn't do this in a sly way; you could see she was unhappy and fearful. Later she began to handle herself. A boy 3½ first became upset about his younger sister's body, and then began to worry about everything that was broken in the house. He would ask his mother nervously, "Why is this tin soldier broken?" There was no sense to this question,

because he broke it himself the day before. Everything that he saw damaged seemed to remind him of his fears about himself.

It's wise to realize ahead of time that a normal child is likely to be wondering about things like bodily differences between 2½ and 3½, and that if he isn't given a comforting explanation when he first gets curious, he's apt to come to worrisome conclusions. It's no use waiting for him to say, "I want to know why a girl isn't made like a boy," because he won't be that definite. He may ask some kind of question, or he may hint around, or he may just wait and get worried. Don't think of it as an unwholesome interest in sex. To him it's just like any other important question at first. You can see why it would be bad to shush him, or scold him, or blush and refuse to answer. That would give him the idea he was on dangerous ground, which is what you want to avoid. On the other hand, you don't need to be solemn as if you were giving a lecture. It's easier than that. You try to make it clear, in a matter-of-fact cheerful tone, that girls and women are *made* different from boys and men; they are *meant* to be that way. A small child gets an idea more easily from examples. You can explain that Johnny is made just like Daddy, Uncle Harry, David, and so on, and that Mary is made like Mommy, Mrs. Jenkins, and Helen (listing all the individuals that the child knows best). A little girl needs extra reassurance, because it's natural for her to want to have something that she can see. (I heard of a little girl who complained to her mother, "But he's so fancy and I'm so plain.") It will help her to know that her mother likes being made the way she is, that her mother loves her just the way she's made. This may also be a good time to explain that girls when they are older can grow babies of their own inside them and have breasts with which to nurse them. That's a thrilling idea at 3 or 4.

DIFFERENT CAUSES FOR HANDLING THE GENITALS

304. In the infant it's wholesome curiosity. Babies in the last half of the first year discover their genitals the way they discovered their fingers and toes, and handle them the same way, too. The year-and-a-quarter baby, sitting on the potty, explores himself with definite curiosity, for a few seconds at a time. This won't come to anything, or start a bad habit. You can

distract him with a toy if you want, but don't feel that you've *got* to. It's better not to give him the idea that he is bad, or that his genital is bad. You want him to go on having a wholesome, natural feeling about his entire body. If he is scared about any part of himself, it draws his attention to it, gets it on his mind, and may have bad results later. Furthermore, if you try to stop a year-old baby by saying "no, no," or slapping his hand, or yanking it away, it's apt to make him more determined.

305. **At three it's related to his feelings.** Children between 3 and 6 are surprisingly grown-up in lots of ways. They are sociable with people of all ages. They love intensely those who are close to them, and even become romantic. The boy of 3½ will declare that he is going to marry his mother when he grows up. He has no definite idea of what marriage is, but he knows whom he loves and can't be argued out of it. The little girl is apt to feel the same way about her father.

We realize now that there is an early stirring of sexual feeling at this period which is an essential part of normal development. (In former times people believed that nothing of this sort occurred until adolescence, probably because they themselves had been brought up so frightened of sex they wanted to avoid recognizing it as long as possible in their children.) Children of 3, 4, and 5 are physically affectionate. They cling to their favorite grownups and lean against them. They are interested in each others' bodies, have the desire occasionally to see and touch them. This is one reason why they like to play doctor.

If you discover your small child in some sort of sex play alone or with others, it's better to check the impulse you may have, quite understandably, to act shocked or angry or to tell him that he will harm himself. Usually nothing has to be said, because children turn to something else when interrupted this way. If not, the mother can cheerfully suggest some other game. But it's sensible for a mother to keep some track of a group of children who are in a period of occasional interest in sex, and make sure they have plenty of other things to do. The principal reason is that some children are upset and worried by what is done and said, especially if there is an older child, with an unwholesome attitude, leading them on. Naturally parents should not become suspicious snoopers, or make accusations.

If you realize that this mild early interest in sex is a natural part of the slow process of growing up, and that it occurs to a degree in all wholesome children, you can take a sensible view of it. If a child is not preoccupied with sex, if he is generally outgoing, unworried, and has plenty of other interests and playmates, there is no cause for concern. If not, he needs to be helped, not scolded.

306. **A lot at three may be due to worry.** In Section 303 there were examples of children in the neighborhood of 3 years who handled themselves a great deal, in a preoccupied manner after they became worried about why boys aren't made the same as girls. It's important for parents to know that the fear that something will happen or has happened to the genitals is one of the commonest causes of *excessive* handling or masturbation in young childhood.

To tell such a child that he'll injure himself will make matters worse. To tell him that he's bad and that you won't love him any more will give him a new fear. The wise thing is to try to take away his fear as soon as you see it developing. If the mother of the little boy who said, "Baby is boo-boo," had known ahead of time that this misunderstanding and this worry were common, she could have started to reassure him the first time he said it. The same thing applies to the mother of the little girl who anxiously tried to undress the other children.

307. **After six there's a stronger effort to control it.** Between the ages of 6 and puberty it seems as if the child, by his own nature, makes an effort to suppress the impulse to masturbate. Most children get the idea that masturbation is considered wrong, whether their parents have told them so or not, and this is the period when their consciences are becoming strong. But it doesn't stop altogether in all children. Occasionally a child is drawn into it in the group because the others are doing it. It's a time in his life when he's striving with might and main to become a "regular guy."

308. **It may be a sign of tenseness and worry at any age.** At any age there are a few children who handle their genitals a great deal, sometimes in public. They hardly seem to be aware of what they are doing. They are usually tense or worried children. They aren't nervous because they are masturbating; they

are masturbating because they are nervous. The job here is to find out what's causing the tenseness, instead of attacking the masturbation directly. An 8-year-old boy is terrified that his ill mother is going to die. He can't put his mind on schoolwork but absent-mindedly handles his genitals in school as he gazes out the window. Another child is thoroughly maladjusted, doesn't know how to get along with other children, has no close connection with the world around him. Cut off from the outside, he must live within himself. Such children and their parents need the help of a psychiatrist or child-guidance clinic (Section 338).

309. **Why threats are harmful.** Most of us heard in childhood the threat that masturbation would lead to insanity. This belief is untrue. It grew up because certain adolescents and young adults, who are becoming seriously ill mentally, masturbate a great deal. But they aren't becoming insane because they are masturbating. The excessive masturbation is just one symptom of the nervous breakdown. This is an example of the fact that frequent masturbation is due to something else going wrong in the child's life or in his spirit. The job is to find the cause.

What's wrong with telling a child that masturbation will make him sick, or injure his genitals, or mark him as an evil person? First of all, none of these things is true. In the second place, and more important, it's risky and it's wrong to put deep fears into a child's mind. The self-confident, tough-minded kind of child may not be much affected by these threats. But the sensitive child takes them to heart. He may develop such a morbid fear of anything sexual that he grows up maladjusted, afraid, or unable to marry or have children.

Though masturbation itself doesn't lead to nervousness, excessive *worry* about it can certainly cause nervousness. I think of an adolescent boy whose parents were morbidly afraid of masturbation. They hired a companion for their son whose job it was to stay close to him 24 hours a day, to make sure he didn't do it. This reminded him of masturbation constantly, and at the same time gave him a monstrous fear of it. This is an exaggerated case, but it's an example of how wrong it is to attack the problem blindly. It's important that parents not only avoid threats but also avoid getting the child's mind on it.

310. Why there is more at adolescence. Among adolescents there tends to be an increased urge to masturbate for reasons that are easy to understand. Glandular changes are taking place that transform boy into man, girl into woman. The increased function of the glands doesn't affect just the body. It affects the thoughts and emotions. The child becomes increasingly aware of his sexual and romantic feelings, not because he wants to, but because his glands say he has to. Yet he is nowhere near ready, in the early part of adolescence, to express his feelings openly. When he is more grown-up, the same impulses will find expression in dates, romantic companionship, dancing, and flirting. Later still, they will lead to falling in love in earnest and marriage.

Some conscientious adolescents feel guilty and worried about masturbation, even when it's just a thought, and need reassurance. If a child seems to be generally happy and successful, doing well in school, getting along with his friends, he can be told that it is nothing to worry about. This won't take away all his feeling of guilt, but it will help. If, on the other hand, he is wrapped up in himself, or unable to enjoy friendships, or is getting into trouble with his schoolwork, then it is time to find help from someone who understands adolescents well. The best person would be a children's psychiatrist. If that's not possible, talk to the guidance teacher or counselor in the high school. Frequent masturbation, or preoccupation with it, in an unhappy child, is only one symptom of a larger problem.

"THE FACTS OF LIFE"

311. Sex education starts early whether you plan it or not. It is common to think that sex education means a lecture at school or a solemn talk by a parent at home. This is taking too narrow a view of the subject. A child is learning about "the facts of life" all through his childhood, if not in a good way then in a bad way. Sex is a lot broader than just the matter of how babies are made. It includes the whole subject of how men and women get along with each other, and what their respective places are in the world. Let me give you a couple of bad examples. Suppose a boy has a father who is disagreeable and abusive to the mother. You can't educate the boy with a lecture at

school telling him that marriage is a relationship of mutual love and respect. His experience tells him differently. When he learns about the physical side of sex, whether it's from a teacher or from other children, he will fit it into the picture he has of a man being disagreeable to a woman. Or take the example of a girl who grows up feeling unwanted because she thinks her parents prefer her younger brother. She is going to resent men, because she believes that they get all the breaks—that women are always the victims. It won't matter how many books or talks you give her about sex and marriage. Whatever she hears or experiences she will fit into the pattern she has fixed in her mind: it's the man taking advantage of the woman. Even if she marries, she won't adjust to it.

So a child begins his sex education as soon as he can sense how his mother and father get along with each other in general, and how they feel about their sons and daughters.

312. **A normal child asks questions around three.** A child begins to get more exact ideas about the things that are connected with sex around the ages of 2½, 3, 3½. This is the "why" stage, when his curiosity branches out in all directions. He will probably want to know why boys are made different from girls (which is discussed in Section 303). He doesn't think of it as a sex question. It's just an important question. But if he gains the wrong impression then, it will become mixed up with sex later and give him distorted ideas.

313. **Where do babies come from?** This question is also pretty sure to come up in the period around 3. It's easier and better to begin with the truth, rather than tell him a fairy story and have to change it later. Try to answer the question as simply as he asks it. For instance, you can say, "A baby grows in a special place inside his mother." You don't have to tell him more than that for the time being if it satisfies him. But maybe in a few minutes, maybe in a few months, he'll want to know a couple of other things. How does the baby get in and how does he get out? The first question is apt to be embarrassing to the mother (or father). She may jump to the conclusion that he is now demanding to know about conception and sex relations. Of course he has no such idea. He thinks of things getting into the stomach by being eaten and perhaps wonders if the

baby gets in that way, too. A simple answer is that the baby grows from a tiny seed that was in the mother all the time. It will be months before he wants to know what part the father plays. Some people feel that the child should be told at the time of his earlier questions that the father contributes by putting his seed in the mother, too. Perhaps this is right, especially in the case of the little boy who feels that the man is left out of the picture. But most experts agree that 3 or 4 years is not the age to try to give him the whole picture of the physical and emotional side of intercourse. It's more than the child bargained for, you might say, when he asked his question. All that's necessary is to satisfy his curiosity at the level of his understanding.

To the question how the baby gets out, a good answer is something to the effect that, when he is big enough, he comes out through a special opening that's just for that purpose. (It's just as well to make it clear that it is not the opening for bowel movements or for urine.)

314. **Why not the stork?** You may say, "Why isn't it easier and less embarrassing to tell him about the stork?" There are several reasons. We know that a child as young as 3, if he has a pregnant mother or aunt, may have a suspicion of where the baby is growing from observing the woman's figure, and from bits of conversation that he overhears. It's apt to mystify and worry him to have his mother nervously telling him something different from what he suspects is the truth. Even if he doesn't suspect anything at 3, he is surely going to find out the truth or the half-truth when he's 5 or 7 or 9. It's better not to start him off wrong and have him later decide that you're something of a liar. And if he finds that for some reason you didn't dare tell him the truth, it puts a barrier between you, makes him uneasy. He's less likely to ask you other questions later, no matter how troubled he is. Another reason for telling the truth at 3 is that the child is satisfied with simple answers. You get practice for the harder questions that come later.

Sometimes a small child who has been told where the baby is growing will confuse his parents by talking as if he also believed the stork theory. Or he may mix up two or three theories at the same time. This is natural. Small children believe part of everything they hear, because they have such vivid imagina-

tions. They don't try, like grownups, to find the one right answer and get rid of the wrong ones. You must also remember that a child can't learn anything from one telling. He learns a little at a time, and comes back with the same question until he feels sure that he has gotten it straight.

315. **A step at a time usually satisfies.** Realize ahead of time that your child's questions will never come in exactly the form or at the moment you expect. A parent is apt to visualize the scene at bedtime when the child is in a confidential mood. Actually the question is more apt to be popped in the middle of the grocery store, or while you are talking on the street with a neighbor who is pregnant. If it does, try to curb that impulse to shush the child. Answer him on the spot if you can. If that is impossible, say casually, "I'll tell you in a minute, as soon as we are outside." Don't make too solemn an occasion of it. When he asks you why the grass is green or why dogs have tails, you answer in an offhand way that gives him the feeling that it is the most natural thing in the world. Try to get the same spirit of naturalness into your answers about the facts of life. Remember that even if this subject is charged with feeling and embarrassment for you, it is a simple matter of curiosity to him. The questions, "Why don't babies come until you are married," or "What does the father do about it," may not come until the child is past 6, unless he observes animals. It may satisfy him to know that a seed from the father has to join the one in the mother. It may be a minute or a year before he wants to know how the seed gets in. Then you can explain that the seed comes out of the father's penis and goes into the place where the baby will grow. It will probably be some time before he tries to visualize this situation. When he is ready for that you can bring in something in your own words about loving and embracing.

What about the child who has reached the age of 4 or 5 or more and hasn't asked any questions at all? Parents sometimes assume that this means the child is very innocent and has never thought of these questions. Most people who have worked closely with children would be inclined to doubt this. It is more likely that the child has gotten the feeling, whether the parents meant to give it or not, that these matters are embarrassing. You can be on the lookout for indirect questions and hints and

little jokes that a child will use to test out his parents' reaction. I think of several examples. A child of 7 who was not supposed to know anything about pregnancy kept calling attention to his mother's large abdomen in a half-embarrassed, half-joking way. Here was a good chance, better late than never, for the mother to explain. A little girl who is at the stage of wondering why she isn't made like a boy sometimes makes valiant efforts to urinate standing up. The mother then has an opportunity to give a reassuring explanation, even though the child hasn't asked a direct question. There are occasions almost every day, in a child's conversation about humans and animals and birds, when a mother on the lookout for indirect questions can help the child to ask what he wants to know.

316. **How the school can help.** If a child's mother and father have answered his earlier questions comfortably, he will keep on turning to them as he grows older and wants more exact knowledge. But the school has a chance to help out, too. Many schools make a point of letting children in the first grade, if not before, take care of animals, such as rabbits, guinea pigs, or white mice. This gives them an opportunity to become familiar with all sides of animal life, feeding, fighting, mating, birth, and suckling of the young. It is easier in some ways to learn these facts in an impersonal situation, and it supplements what the child has learned from his parents. But what he finds out in school he will probably want to discuss and clear up further at home.

By the fifth grade it is good to have biology taught in a simple way, including a discussion of reproduction. Some, at least, of the girls in the class will be entering the puberty stage of development and need some accurate knowledge of what is happening. The discussion from a somewhat scientific point of view in school should help the child to bring it up more personally at home.

317. **The right slant at adolescence.** The puberty stage of development begins in most girls somewhere between 9 and 13, and in boys between 11 and 15. Whether the school helps with a course in biology or not, it is certainly important for a parent to have some discussion with a child by the time the puberty change begins. The girl needs to be told that during

the next 2 years her breasts will develop, hair will grow in the genital region and under the arms, that she will grow rapidly in stature and in weight, that her skin will change its texture and may become liable to pimples, that approximately 2 years after the beginning of her puberty development, she will probably have her first menstrual period. How you tell her about her monthly periods makes a difference. Some mothers emphasize what a curse they are. But it is a mistake to stress that part first to a child who is still immature and impressionable. Other mothers emphasize how delicate a girl becomes at such times and how careful she must be of herself. This kind of talk makes a bad impression, particularly on those girls who have always been somewhat resentful that they weren't boys anyway and on those who are inclined to worry about their health. The more doctors and women's educators learn about the periods, the more convinced they have become that most girls and women can live perfectly normal, healthy, vigorous lives right through them. It is only the occasional girl who has cramps severe enough to make her need to rest or take extra care of herself.

When a child is on the threshold of womanhood, it's good for her to be looking forward to it happily, not feeling scared or resentful. The best thing to emphasize about menstruation is that the uterus is being prepared for the time she will be a mother.

It will help put the child in the right mood during the months she is waiting for her first period to give her a belt and a box of napkins. This will make her feel grown-up and ready to deal with life, rather than waiting for life to do something to her.

Boys, by the time they are in the stage of puberty development, need to be told about the naturalness of erections and nocturnal emissions. Fathers who know that nocturnal emissions are certain to occur if a boy is normal, and that there will probably be a strong urge to masturbate at times, sometimes tell the boy that these things are not harmful if they don't happen too often. I think it's a mistake for a parent to set a limit, even though it may sound sensible. The trouble is that an adolescent easily becomes worried about his sexuality, easily imagines he is "different" or abnormal. Being told "This much

is normal, that much is abnormal" is apt to get his mind more preoccupied with sex and actually lead to more emissions and more urge to masturbate.

It's natural in most families for the father to talk to his son and the mother to her daughter. This shouldn't be considered an absolute rule, though, and if it comes much more easily to the other parent, then that's the best way. It's preferable, just as in earlier childhood, for talk about sex to come up easily from time to time, rather than being one big solemn lecture. The parent has to be willing to bring it up early in puberty, though, if the child doesn't.

One mistake that is easy to make, especially if the parents themselves were brought up in fear of sex, is to concentrate on all the dangerous aspects of it. A nervous mother may make her daughter so scared of becoming pregnant that the poor girl has a terror of boys under all circumstances. Or the father may overfill his son with dread of venereal disease. Of course the child who is well into adolescence needs to know how pregnancy takes place, and that there is danger of disease in being promiscuous, but these disturbing aspects of sex shouldn't come first. The adolescent should think of it as primarily wholesome and natural and beautiful.

What worried parents find hard to believe, but what people who have studied young people know well, is that the happy, sensible, successful adolescent doesn't get into trouble with sex just because he hasn't been warned sternly enough. All the common sense, self-respect, and kindly feeling toward people, which he has built up through the years keep him on an even keel even when he is sailing through an entirely new phase of development. To turn it around the other way, the adolescent who gets himself or herself into trouble with the wrong kind of companions is usually a child who for years has been mixed up with himself and others.

The danger of scaring a sensitive child about sex is partly that you make him tense and apprehensive at the time, partly that you may destroy his or her ability to adjust to marriage later.

From Six to Eleven

FITTING INTO THE OUTSIDE WORLD

318. There are lots of changes after six. The child becomes more independent of his parents, even impatient with them. He's more concerned with what the older kids say and do. He develops a stronger sense of responsibility about matters which *he* thinks are important. His conscience may become so stern that it nags him about senseless things like stepping over cracks. He is interested in impersonal subjects like arithmetic and engines. In short, he's beginning the job of emancipating himself from his family and taking his place as a responsible citizen of the outside world.

For contrast, think what the younger child between 3 and 5 is like. He's openly devoted to his parents. He takes their word for it that certain things are right, wants to eat with the same table manners they have, likes to be dressed in clothes they choose. He uses their words, even though he doesn't understand all of them.

Millions of years ago man's ancestors grew to adulthood in a few years, the way animals do. They developed full-sized bodies, but in their feelings they were probably a lot like our 5-year-olds whose lives are largely made up of copying their elders. It was only much later that men developed the ability to become more independent of their parents, learned to live by co-operation, rules, self-control, thinking things out. It takes years for each individual to learn how to get along in this complicated grown-up way. Probably that's the reason why human beings are held up so long in their physical growth. The infant increases rapidly in size like an animal, and so does the older child in the puberty period. But in between he slows down more and more, particularly in the 2 years just before puberty development begins. It's as if his nature were saying, "Whoa! Before you can be trusted with a powerful body and full-grown instincts, you must first learn to think for yourself, to control your wishes and instincts for the sake of others, learn how to

get along with your fellows, understand the laws of conduct in the world outside your family, study the skills by which people live."

319. **Independence of parents.** The child after 6 goes on loving his parents deeply underneath, but he usually doesn't show it as much on the surface. He's apt not to enjoy being kissed, at least in public. He's cooler toward other adults, too, unless he's sure they're swell people. He no longer wants to be loved as a possession or as an appealing child. He's gaining a sense of dignity as an individual person, and he'd like to be treated as such.

From his need to be less dependent on his parents, he turns more to trusted adults outside his family for ideas and knowledge. If he mistakenly gets the idea from his admired science teacher that red blood cells are larger than white blood cells, there's nothing his father can say that will change his mind.

The ideas of right and wrong that his parents taught him have not been forgotten. In fact they have sunk in so deep that he now thinks of them as his ideas. He is impatient when his parents keep reminding him what he ought to do, because he knows already and wants to be considered responsible.

320. **Bad manners.** The child drops the extra-grown-up words out of his vocabulary and picks up a little tough talk. He wants the style of clothes and haircut that the other kids have. He may leave his tie off and shoe laces untied with the same determination with which people wear party buttons during a political campaign. He may lose some of his table manners, come to meals with dirty hands, slump over his dish, and stuff more in his mouth. Without realizing it, he is really accomplishing three things at once. He's shifting to his own age for his models of behavior. He's declaring his right to be more independent of his parents. He's keeping square with his own conscience, because he's not doing anything that's morally wrong.

These "bad manners" and "bad habits" are apt to make good parents unhappy. They imagine that the child is forgetting all that they taught him so carefully. Actually, these changes are proof that he has learned for keeps what good behavior is—otherwise he wouldn't bother to rebel against it. It will come to the surface again when he feels he has established his inde-

pendence. Meanwhile, understanding parents can be pleased underneath, knowing that their child is growing up normally.

I don't mean that every child is a hellion during this age period. One who gets along happily with easygoing parents may show no open rebelliousness at all. Most girls show less than boys. But if you look carefully, you will still see signs of change of attitude.



Manners may seem to be lost.

What do you *do*? After all, the child must take a bath once in a while, get neatened up on Sunday. As usual, you have to compromise. Overlook some of his less irritating bad habits, realizing that they are probably not permanent. When you have to ask him to wash his hands, try to be friendly, matter-of-fact. It's the nagging tone, the bossiness that he finds irritating, and that spurs him on unconsciously to further balkiness.

321. Gangs and clubs. This is the age for the blossoming of

clubs and gangs. A number of kids who are friends already decide to form a secret club. They work like beavers making membership buttons, fixing up a meeting place (preferably hidden), drawing up a list of rules. They may never figure out what the secret is. But the secrecy idea probably represents the need to prove they can govern themselves, unmolested by grownups, unhampered by other more dependent children.

It seems to help the child, when he's trying to be grown-up, to get together with others who feel the same way. Then the group tries to bring outsiders into line by making them feel left out, or by picking on them. It sounds conceited and cruel to grownups, but that's because we are accustomed to use more refined methods of disapproving of each other. The children are only feeling the instinct to get community life organized. This is one of the forces that makes our civilization click.

322. **He becomes strict about some things.** Think of the games a child enjoys at this age. He's no longer so interested in make-believe without any plan. He wants games that have rules and require skill. In hopscotch, jacks, and mumblety-peg you have to do things in a certain order, which becomes harder as you progress. If you miss, you must penalize yourself, go back to the beginning, and start over again. It's the very strictness that appeals. This is the age for starting collections, whether it's stamps or cards or stones. The pleasure of collecting is in achieving orderliness and completeness.

At this age the child has the desire *at times* to put his belongings in order. Suddenly he neatens his desk, puts labels on the drawers, or arranges his piles of comic books. He doesn't keep his things neat for long. But you can see that the urge must be strong just to get him started.

323. **Compulsions.** The tendency toward strictness becomes so strong in many children around 8, 9, and 10 that they develop nervous habits. You probably remember them from your own childhood. The commonest is stepping over cracks in the sidewalk. There's no sense to it, you just have a superstitious feeling that you ought to. It's what a psychiatrist calls a "compulsion." Other examples are touching every third picket in a fence, making numbers come out even in some way, saying certain words before going through a door. If you think you

have made a mistake, you must go way back to where you were absolutely sure that you were right, and start over again.

The hidden meaning of a compulsion pops out in the thoughtless childhood saying, "Step on a crack, break your grandmother's back." Everyone has hostile feelings at times toward the people who are close to him, but his conscience would be shocked at the idea of really harming them, and warns him to keep such thoughts out of his mind. And if a person's conscience becomes *excessively* stern, it keeps nagging



"Step on a crack, break your grandmother's back."

him about such "bad" thoughts, even after he has succeeded in hiding them away in his subconscious mind. He still feels guilty, though he doesn't know what for. It eases his conscience to be extra careful and proper about such a senseless thing as how to navigate a crack in the sidewalk.

The reason a child is apt to show compulsions around the age of 9 is not that his thoughts are more wicked than pre-

viously, but that his conscience is just naturally becoming stricter at this stage of development. He is now worrying, perhaps, about his suppressed desire to hurt his brother or father or grandmother when they irritate him. We know that this is an age when the child is also trying to suppress thoughts about sex, and these sometimes play a part in compulsions, too.

Mild compulsions are so common around the ages of 8, 9, 10 years, that it's a question whether they should be considered normal, or a sign of nervousness. They are certainly more frequent in children who have been brought up strictly. I wouldn't worry too much about a mild compulsion, like stepping over cracks, in a child around 9 years who was happy, outgoing, doing well in school, but only wonder whether I was being too severe and disapproving toward him. On the other hand, I'd call on a psychiatrist for help (Section 338), if a child had compulsions that occupied a lot of his time (for instance, excessive hand-washing, precautions against germs, elaborate ceremonies about going to the bathroom), or if he were under 8, or if at any age he were tense, worried, unsociable.

324. Tics. Tics are nervous habits such as eye-blinking, shoulder-shrugging, facial twitchings, neck-twisting, throat-clearing, sniffing, dry coughing. Like compulsions, tics occur most commonly around the age of 9, but they can come at any age after 2. The motion is usually quick, repeated regularly, and always in the same form. It is more frequent when the child is under tension. A tic may last off and on for a number of weeks or months and go away for good, or a new one may take its place. Blinking, sniffing, throat-clearing, dry coughing, often start with a cold but continue after the cold is gone. Shoulder-shrugging may begin when a child has a new loose-fitting garment that feels as if it were falling off. In another case a definite worry may start a tic, as when a child keeps looking over his shoulder after a frightening experience. A child may copy a tic from another child, but he wouldn't have picked it up if there hadn't been a tenseness already waiting in him.

Tics, like compulsions, are more common in tense children, with fairly strict parents. There may be too much pressure at home. Sometimes the mother or father is going at the child too hard, directing him, correcting him whenever he is in sight. Or

the parents may be showing constant disapproval in a quieter way, or setting standards that are too high, or providing too many activities such as dancing, music, and athletic lessons. If the child were bold enough to fight back, he would probably be less tightened up inside. But being, in most cases, too well brought-up for that, he bottles up his irritation, and it keeps "backfiring" in the tic.

The child should not be scolded or corrected on account of his tics. They are practically out of his control. The whole effort should go into making his home life relaxed and agreeable, with the least possible nagging, and making his school and social life satisfying, not too strenuous. Tics must be distinguished from chorea and general restlessness (Section 431).

325. Helping a child to be sociable and popular. The important early steps in bringing up a child to be sociable and popular are: not fussing over him in his first years; letting him be around with other children his size from the age of a year; allowing him freedom to develop independence; the fewest changes possible in where the family lives and where he goes to school; letting him, as far as possible, dress like, talk like, play like, have the same allowance and other privileges as the other average children in the neighborhood, even if you don't approve of the way they are brought up. (Of course, I don't mean letting him take after the town's worst scoundrel.)

How happily a person gets along as an adult in his job, in his family and social life, depends a great deal on how he got along with other children when he was young. If parents give a child high standards and high ideals at home, these will form part of his character and show up in the long run, even though he goes through a period of bad English and rough manners in the middle period of childhood. But if parents are unhappy about the neighborhood they live in and the companions their child has, give him a feeling that he is different from the others, discourage him from making friends, the child may grow up unable to mix with any group or to make a happy life. Then his high standards won't be of any use to the world or to himself.

If a child is having trouble making friends it will help most if he can be in a school and in a class where the program is flex-

ible. Then the teacher can arrange things so that he has chances to use his abilities to contribute to class projects (Section 334). This is how the other children learn to appreciate his good qualities and to like him. A good teacher who is respected by the class can also raise a child's popularity in the group by showing that she appreciates him. It even helps to put him in a seat next to a very popular child, or to let him be partners with him in marching, going on errands around the school, etc.

There are things that the parents can do at home, too. Be friendly and hospitable when your child brings others home to play. Encourage him to invite them to meals and then serve the dishes that they consider "super." When you plan week-end trips, picnics, excursions, movies and other shows, invite another child with whom your child wants to be friends (not necessarily the one you would like him to be friendly with). Children, like adults, have a mercenary side, and they are more apt to see the good points in another child who provides treats for them. Naturally you don't want your child to have only "bought" popularity, and that kind won't last anyway. But what you are after is to "prime the pump," to give him a chance to break into a group that may be shutting him out because of the natural clannishness of this age. Then, if he has appealing qualities, he can take over from that start and build real friendships of his own.

COMICS, RADIO, AND MOVIES

326. **The comics are serious business.** Conscientious parents often dread the comic strips and comic books, thinking that they ruin their children's taste for good reading, fill their minds with morbid ideas, keep them indoors, interfere with homework, and waste good money. All these accusations have a bit of truth in them. But when children show a universal craving for something, whether it's comics or candy or jazz, we've got to assume that it has a positive, constructive value for them. It may be wise to try to give them what they want in a better form, but it does no good for us to cluck like nervous hens.

Children of all ages are filled with strivings to do great deeds of the kind they imagine adults as performing. In their early years they are satisfied copying the grown-up occupations that

they see around them: driving trains, delivering groceries, playing doctor and nurse.

As they get into the age period beyond 6, their imaginary life is partly split off from their real life. They now spend long hours of the day applying themselves to schoolwork and the task of getting along with their fellows. When they have time to dream, their growing independence urges them to imagine deeds of their own that have nothing to do with their parents' and neighbors' humdrum pursuits. Feeling now that they know in themselves what is right and wrong, they delight in stories where good is pitted against evil and always wins in the end. And since this is the stage when they feel from within the necessity to bottle up and control their aggressive impulses in daily life, there is all the more reason to dream of bold adventures and violent battles. You can see why the comics are meat and drink at this age. It's a mistake to think that these wild stories are put over on children. The people who write and draw them are only turning out what they have found that children want most. To educated adults they seem crude, lacking in any literary quality or fine idealism. This only shows that adults are at a different stage of development from the 10-year-old, which they should be. The child first must go through a period of blood-and-thunder adventure, where superhuman might *and* right always win at the last minute, before he can graduate to more sophisticated reading. There's no more reason to think it will ruin his taste than there is to fear that letting him creep on hands and knees in infancy will keep him from ever walking in the more elegant upright position.

Naturally you don't want your child to be reading comics so constantly that he never goes outdoors and never has time to see his friends. You wouldn't want him to be that wrapped up in good literature, either. You may have to set limits: only so many comic books a week or only for a certain number of hours each day. Even a happy child who gets along well may have spells of being lost in the comics, but they don't last forever. If, on the other hand, a child lives entirely in his imagination, in stories, radio, and movies, he needs help, both from school and from parents, in finding the joy of friendships and games. (See Section 325.)

327. Radio programs. Children's fascination with the radio brings up several problems for parents.

The first difficulty is with the child who is so scared by the tales of violence that he can't go to sleep at night, or has nightmares. This is most apt to happen in the early years of radio listening, around 5, and 6. But the sensitive child with a morbid imagination may be bothered until a much older age. When a child is regularly upset in this way, whatever his age, his parents had better forbid the worst programs, explaining it reasonably.

Another problem comes up in the child who glues himself to the radio from the minute he comes in, in the afternoon until he is forced to go to bed at night. He doesn't want to take time out for supper or for his homework or even to say hello to his family. It's better for the parents and child to come to a reasonable but definite understanding about which hours are for which, and then for everyone to stick to the bargain. Otherwise the parents are apt to be reminding him of his duties whenever they hear his radio going, and he is turning it on whenever he thinks they aren't paying attention. Some children and adults can work just as well with the radio on (they say better), though this is less likely with talking than with musical programs. There is no objection to this if the child is keeping up on his homework.

In general, if a child is taking care of his homework, staying outside with his friends in the afternoon, coming to supper, going to bed when it's time, and not being frightened, I would be inclined to let him spend as much of his evening with the radio as he chooses. I wouldn't nag him about it or twit him about it. You won't take away his appetite for it by these methods—quite the reverse. Remember that these stories of amazing adventures, which sound like trash to you, are deeply moving and even character-building experiences for him. Remember also that it's part of his social life to discuss them with his friends, just the way grownups discuss books and plays and the news.

If the rest of the family is driven mad by having to listen to a child's programs, and if they can afford the expense, it's worth while to get him a secondhand radio for his own room.

328. The movies. Adventure stories in the movies have the same appeal as the comics and radio stories. I think it is reasonable, if it is the custom in the neighborhood, to let a child of 7 see one suitable show over the week end, in the afternoon. The child of 12 or so who lives out of town might be allowed to see an early evening show instead, if his only chance to go is with his parents. It is unfair and unwholesome to take young children at night. I wouldn't let a child go to the movies more than once a week, because a theater is a poor place in which to spend hours, from the point of view of health.

Movies are a risky business under the age of 7. You hear of a program, let's say an animated cartoon, that sounds like perfect entertainment for a small child. But when you get there, you find, three out of four times, that there is some episode in the story that scares the wits out of little children. You have to remember that a child of 4 and 5 doesn't distinguish clearly between make-believe and real life. A witch on the screen is just as alive and terrifying to him as a flesh-and-blood burglar would be to you. The only safe rule that I know is not to take a child under 7 to a movie unless you, or someone else who knows small children well, has seen it and is *positive* that it contains nothing upsetting. Don't even take an older child to the movies if he gets frightened easily.

STEALING

329. Taking things in early childhood. Small children take things that don't belong to them, but it isn't really stealing. They don't have any clear sense of what belongs to them and what doesn't. They just take things because they want them very much. It's better not to make a small child feel wicked; that just scares him. The mother only needs to remind him that the toy is Peter's, that Peter will want to play with it soon, and that he himself has a toy like that at home, or that she will get him one for Christmas.

330. What stealing means in the child who knows better. Stealing that means more may crop up in the period between 6 and adolescence. When a child at this age takes something, he knows he is doing wrong. He is more apt to steal secretly, and hide what he has stolen.

When a parent or a teacher finds that a child has stolen something, she is pretty upset. Her impulse is to jump on him hard and fill him with a sense of shame. This is natural enough, since we have all been taught that stealing is a serious crime. It scares us to see it coming out in our child.

But it isn't wise to try to scare the daylights out of a 7-year-old; in fact, it's apt to make matters worse. He knew he was doing something wrong, but his impulse to take it was too strong. Before you do anything else, try to understand what made him do it.

Let's take first the child around 7 who has been carefully brought up by conscientious parents, who has a reasonable amount of toys and other possessions, and gets an allowance. If he steals something, it's apt to be small amounts of money from his mother or from classmates at school, or his teacher's pen, or a pack of trading cards from another child's locker. Often there's no sense to the stealing, because he may own these things anyway. We can see that he's mixed up in his feelings. He seems to have a blind craving for something, and tries to satisfy it by taking an object he doesn't really need. What does he really want?

In most cases, the child is unhappy and lonesome to some degree. He doesn't have a sufficiently warm relationship with his parents, or he doesn't feel completely successful in making friends with children his own age. (He may feel this way even though he is actually quite popular.) I think the reason that stealing occurs so often around 7 is that the child himself at this age is trying instinctively to become more independent of his parents. Then, if he hasn't the knack of making equally warm and satisfying friendships, he gets into "no-man's land" and feels isolated. This explains why some children who steal money use it all to try to buy friendship. One will pass out dimes and nickels to his classmates. Another uses it to buy candy for the class. It's not just that the child is drawing away a little from the parents. The parents are apt to be more disapproving of him at this less appealing age.

The early part of adolescence is another period when some children become more lonely, because of increased self-consciousness, sensitiveness, and desire for independence.

A craving for more affection probably plays some part in the stealing of all ages, but there are usually other factors, too, in individual cases, such as fears, jealousies, resentments. A girl who is envious of her brother may repeatedly steal objects that are linked in her unconscious mind with boys.

331. **What to do for the child who steals.** The treatment of the type of stealing we have been discussing is not to shame the child, since that will make him feel more lonely still. But consider whether he needs more affection and approval at home, and help in making closer friendships outside. (See Section 325.) This is the time to give him, if possible, an allowance of about the same size as the other children he knows. It helps in two ways: The child feels it is a token of love from his parents, and it helps him to establish himself as "one of the boys." The parents should get help from a child-guidance clinic or a children's psychiatrist if they can (Section 338).

I don't mean that the parents shouldn't mention the stealing. It's better to get it out in the open in an understanding way. Naturally, the child should return what he has taken, on the basis that the owner will need it. It might be wise for the parent to help make up the sum to be returned, or even to make a present to the child of an object similar to the one he has stolen and returned. This is not a reward for stealing, but a sign that the parent is concerned that the child should not take what isn't his, and that he should have his heart's desire if it is reasonable.

The next type of stealing is entirely different. There are plenty of neighborhoods where the kids think of swiping things as the daring and manly thing to do. It's not proper, but it's not vicious, and it's not a sign of maladjustment. The boy of conscientious parents who lives in such a neighborhood may need an understanding talk, but should not be treated as a criminal because he joins in one of these adventures. He is only obeying a normal instinct to make his place in the group. The cure lies in better economic conditions, better schools, better recreational facilities.

Finally, there is the stealing of the aggressive child or adult who has little conscience or sense of responsibility. A person gets this way only through a childhood quite lacking in love

and security. His only hope is in good psychiatric treatment and being able to live with kind, affectionate people.

Schools

WHAT A SCHOOL IS FOR

332. The main lesson in school is how to get along in the world. Different subjects are merely means to this end. In the olden days, it used to be thought that all a school had to do was make children learn to read, write, figure, and memorize a certain number of facts about the world. I heard a great teacher tell how, in his own school days, he had to memorize a definition of a preposition that went something like this: "a preposition is a word, generally with some meaning of position, direction, time, or other abstract relation, used to connect a noun or pronoun, in an adjectival or adverbial sense, with some other word." Of course he didn't learn anything when he memorized that. You only learn things when they *mean* something to you. One job of a school is to make subjects so interesting and real that children will want to learn and remember.

You can only go so far with books and talk. You learn better from actually living the things you are studying. Children will pick up more arithmetic in a week from running a school store, making change, and keeping the books than they will learn in a month out of a book of cold figures.

There's no use knowing a lot if you can't be happy, can't get along with people, can't hold the kind of a job you want. The good teacher tries to understand each child so that she can help him overcome his weak points and develop into a well-rounded person. The child who lacks self-confidence needs chances to succeed. The trouble-making show-off has to learn how to gain the recognition he craves through doing good work. The child who doesn't know how to make friends needs help in becoming

sociable and appealing. The child who seems to be lazy has to have his enthusiasms discovered.

A school can go only so far by a cut-and-dried kind of program, where everyone in the class reads from page 17 to page 23 in the reader at the same time and then does the examples on page 128 of the arithmetic book. It works well enough for the average child who is adjusted anyway. But it's too dull for the bright pupils, too speedy for the slow ones. It gives the boy who hates books a chance to stick paper clips in the pigtails of the girl in front. It does nothing to help the girl who is lonely or the boy who needs to learn co-operation.

333. **How schoolwork is made real and interesting.** If you start with a topic that is real and interesting, you can use it to teach all manner of subjects. Take the case of a third-grade class in which the work of the year centers around Indians. The more the children find out about Indians the more they want to know. The reader is a story of the Indians, and they really want to know what it says. For arithmetic they study how the Indians counted and what they used for money. Then arithmetic isn't a separate subject at all but a useful part of life. Geography isn't spots on a map. It's where the Indians lived and traveled, and how life on the plains is different from forest life. In science study the children make dyes from berries and dye cloth, or grow corn. They can make bows and arrows and Indian costumes.

People are sometimes uneasy about schoolwork's being too interesting, feeling that a child needs to learn, most of all, how to do what's unpleasant and difficult. But if you stop to think of the people you know who are unusually successful, you'll see that in most cases they are the ones who love their work. In any job there's plenty of drudgery, but you do the drudgery because you see its connection with the fascinating side of the work. Darwin was a wretched student in all his subjects in school. But in later life he became interested in natural history, performed one of the most painstaking jobs of research that the world has ever known, and worked out the theory of evolution. A high-school student may see no sense in geometry, hate it, and do badly in it. But if he is in the Air Force and sees what geometry is for, realizes that it may save the lives of the whole

crew, he will work at it like a demon. The teachers in a good school know well that every child needs to develop self-discipline to be a useful adult. But they have learned that you can't snap discipline onto him from the outside like handcuffs; it's something that he has to develop inside, like a backbone, by first understanding the purpose of his work and feeling a sense of responsibility to others in how he performs it.

334. **How a school helps a difficult child.** A flexible, interesting program does more than just make schoolwork appealing. It can be adjusted for the individual pupil. Take the case of a boy who had spent his first two years in a school where teaching was done by separate subjects. He was a boy who had great difficulty in learning to read and write. He had fallen behind the rest of the class. Inside he felt ashamed about being a failure. Outwardly he wouldn't admit anything except that he hated school. He had never gotten along too easily with other kids anyway, even before his school troubles began. Feeling that he was a dumbbell in the eyes of the others made matters worse. He had a chip on his shoulder. Once in a while he would show off to the class in a smarty way. His teacher used to think that he was just trying to be bad. Of course, he was really attempting, in this unfortunate way, to gain some kind of attention from the group. It was a healthy impulse to keep himself from being shut out.

He transferred to a school that was interested in helping him not only to read and write, but to find his place in the group. The teacher learned in a conference with his mother that he used tools well and loved to paint and draw. She saw ways to use his strong points in the class. The children were all painting together a large picture of Indian life to hang on the wall. They were also working co-operatively on a model of an Indian village. The teacher arranged for the boy to have a part in both these jobs. Here were things he could do well without nervousness. As the days went by, he became more and more fascinated with Indians. In order to paint his part of the picture well, in order to make his part of the model correctly, he needed to find out more from the books about Indians. He *wanted* to learn to read. He tried harder. His new classmates didn't think of him as a dope because he couldn't read. They thought more about

what a help he was on the painting and the model. They occasionally commented on how good his work was and asked him to help them on their parts. He began to warm up. After all, he had been aching for recognition and friendliness for a long while. As he felt more accepted, he became more friendly and outgoing himself.

335. **Linking school with the world.** A school wants its pupils to learn at firsthand about the outside world, about the jobs of the local farmers and businessmen and workers, so that they will see the connection between their schoolwork and real life. It arranges trips to near-by industries, asks people from the outside to come in and talk, encourages classroom discussion. A class that is studying food may have an opportunity, for example, to observe some of the steps in the collecting, pasteurizing, bottling, and delivery of milk, or in the transportation and marketing of vegetables.

High-school and college students have further opportunities to learn about the world by attending summer work camps. A group of students and teachers may work in a factory or in a farming area, discuss together, and come to understand better, the problems of various occupations and industries and how they are solved.

336. **Democracy builds discipline.** Another thing that a good school wants to teach is democracy, not just as a patriotic motto but as a way of living and getting things done. A good teacher knows that she can't teach democracy out of a book if she's acting like a dictator in person. She encourages her pupils to help decide how they are going to tackle certain projects and the difficulties they later run into, lets them help figure out among themselves which one is to do this part of the job and which one that. That's how they learn to appreciate each other. That's how they learn to get things done, not just in school, but in the outside world, too.

Actual experiments have shown that children with a teacher who tells them what to do at every step of the way will do a good job while she is in the room. But when she goes out, a lot of them stop working, start fooling. They figure that lessons are the teacher's responsibility, not theirs, and that now they have a chance to be themselves. But these experiments showed that

children who have helped choose and plan their own work, and have co-operated with each other in carrying it out, will accomplish almost as much when the teacher is out of the room as in. Why? They know the purpose of the job they are on, and the steps ahead in accomplishing it. They feel that it is their job, not the teacher's. Each one wants to do his share, because he is proud to be a respected member of the group and feels a sense of responsibility to the others.

This is the very highest kind of discipline. This training, this spirit, is what makes the best citizens, the most valuable workers, and even the finest soldiers.

337. **Co-operating with other child specialists.** Even the best of teachers can't solve all the problems of their pupils alone. They need the co-operation of the parents through parent-teacher-association meetings and individual conferences. Then parent and teacher will understand what the other is doing, share what they know about the child. The teacher should even be able to get in touch with the child's scoutmaster, minister, doctor, and vice versa. Each can do a better job by working with the other. It's particularly important in the case of a child with a chronic ailment that the teacher know just what it is, how it's being treated, what she can do or watch for in school. It's just as important for the doctor to know how the disease is affecting the child in school hours, how the school can help, and how he can prescribe treatment so as not to work against what the school is trying to accomplish with the child.

There are children who have problems that the regular teacher and the parents, no matter how understanding, can solve better with the help of specialists in child guidance. Few schools as yet have a psychiatrist. Some, though, have a guidance teacher or a psychologist, or both, trained to help children, parents, and classroom teachers in understanding and overcoming a child's school difficulties. Where there is no guidance teacher or psychologist, or when she finds that the problem is deep-rooted, it is wise to turn to a private children's psychiatrist or to a child-guidance clinic, if such is available.

338. **Psychiatrists, psychologists, and child-guidance clinics.** Parents are apt to be confused about what psychiatrists and psychologists are for and what the difference between them is.

A children's psychiatrist is a physician trained to understand and treat all kinds of behavior problems and emotional problems of children. Back in the 19th century, psychiatrists were mainly concerned with taking care of the insane, and many people are still reluctant to consult them for that reason. But as psychiatrists have learned how serious troubles usually develop out of mild ones, they have turned more and more attention to treating early, everyday problems. In this way they do the most good in the shortest time. There's no more reason to wait to see a psychiatrist until a child is severely upset than there is to wait until he is in a desperate condition from pneumonia before calling the regular doctor.

Psychologst is a very general title used for people, not physicians, who have specialized in one of the many branches of psychology. Psychologists who work with children are trained in such subjects as intelligence testing, and the causes and treatment of learning problems in school.

In a child-guidance clinic (or children's psychiatric clinic), the psychiatrist is the doctor who takes charge of the case, gets to know the child and the parents, and with their help tracks down where the child's worries are coming from, helps the child to understand and outgrow them, advises the parents in handling him. He may call on the psychologist for mental tests to see what the child's weak points and strong points are, or to give the child remedial teaching if, for instance, he has a reading problem. A psychiatric social worker may be asked to make a visit to the school to help find out from the teachers more exactly what difficulties the child is having there, and to give the teacher the benefit of the understanding of the problem that has been gained in the clinic. Some child-guidance clinics are connected with hospitals; others are independent.

In a few cities there are child-guidance clinics connected with the board of education, staffed with psychiatrists, psychologists, social workers, to deal with all kinds of behavior problems. Some state education departments have traveling clinics that visit different communities. Many other school systems, local and state, have only psychologists for the testing and remedial teaching of school problems.

In a city you can inquire about a child-guidance clinic, or a

private children's psychiatrist, or a psychologist for testing, through your regular doctor or a large hospital, through the school principal or superintendent, through a social service agency, or look in the telephone book to see if there is a state Mental Hygiene Committee or Society. If you have no luck, or live in a smaller place, you can write to your state education department or to the National Committee for Mental Hygiene, 1790 Broadway, New York City, and they will tell you the nearest place you can get help.

Some day I hope there will be psychiatrists and psychologists connected with all school systems, so that children, parents, and teachers can ask for advice on all kinds of minor problems as easily and as naturally as they can inquire about inoculations and diet and the prevention of physical disease today.

339. **How to work for good schools.** Parents sometimes say, "It's all very well to talk about an ideal school that makes the work interesting and finds a way to bring out the best in every child. But the school that my child goes to is pretty cut-and-dried and there's nothing I can do about it." That isn't true. Every town and city has the kind of school its citizens want. If they know what good schools are and insist on having them, they can get them. That's how democracy works.

Parents can join their local parent-teacher association, go to meetings regularly, show the teachers and principals and superintendents that they are interested and will back them up when they are using sound methods. They can also vote for local officials who will work for constant improvement in the schools. No school system is ever perfect, and even the best of schools will go downhill unless the citizens stay interested.

There are lots of people who don't realize how much fine schools can accomplish in developing useful, happy citizens. They object to increasing the school budget for smaller classes, better-paid teachers, carpentry shops, laboratories, and afternoon recreation programs. Not understanding the purpose or value of these proposals, they naturally think of them as "unnecessary frills" just to amuse children or make jobs for more teachers. Even from a strictly cash point of view, that's penny wise and dollar foolish. Money spent *wisely* for better child care will pay back the community a hundredfold. First-rate schools

that succeed in making each child feel he really *belongs*, as a useful and respected member of the group, will reduce drastically the number of individuals who grow up irresponsible or criminal. The value of such schools will show even more in all the other children (who would never be criminals anyway), who will take their places in the community as better workers at their jobs, more co-operative citizens, happier individuals in their own lives. How better can a community spend its money than that?

TROUBLE WITH LESSONS

340. There are many causes for failure in schoolwork. Individual problems are more common when a school is using rigid teaching methods, when the attitude toward the children is regimenting and harsh, when the classes are too large for individual attention.

In children themselves there are various reasons for poor adjustment. On the physical side there are eye defects, deafness, occasionally fatigue or chronic illness. On the psychological side there is the child with an inability to read because of a special difficulty in recognizing words, the child who is too nervous and worried about other things, the one who can't get along with teacher or pupils. There is the child who is too smart and the one who can't do the work because his intelligence isn't up to it. (The slow child is discussed in Section 502.)

Don't scold or punish the child who is having difficulties. Try to find out where the trouble lies. Consult with the principal or teacher. Get the help of the school guidance teacher if there is one. Have him tested by the school psychologist if that seems the next step. Consult a child-guidance clinic or a private psychiatrist or psychologist if no specialists are available in school (Section 338). Have him examined physically, including vision and hearing.

341. The extra bright child. In a class where everyone does exactly the same lessons, the child who is smarter than others of his age may be bored because the work is too easy. The only solution seems to be to skip a grade. This may not work out badly if the child is large for his age and also advanced socially. But if not he's apt to become isolated and lost. He may be too

small to compete in games or be popular at dances. He's likely to have younger interests than the other members of his class, which keep him from mixing easily. What good is it for him to enter high school or college at a very young age if he is going to turn into a lonely person?

It is much better in most cases for the bright child to stay in a class that is close to him in age provided the school has a flexible program. He, for instance, is the one to read the more difficult reference books in the library. When a bright child is working for marks and to please the teacher, the other kids are quick to call him smarty and teacher's pet. But if he is working on group projects, they appreciate him all the more because of the extra help he can provide.

Even if you think your child is extra smart, never try to get him into a more advanced grade than the school advises. Usually a teacher knows best about placement. It's cruel for a child to be placed beyond his capacities. In the end he will have to do poorly or be left back again later.

That brings up the question of teaching a bright child to read and figure at home before he starts first grade. It often does harm, and it never helps. It will only put him out of step with the other children, and may make it more difficult for him to catch onto the school's system of teaching these subjects. A parent may say that the child is asking questions about letters and numbers and practically insisting on being taught. This is true to a degree with some children, and there is no harm in casually answering their questions.

But there is another side to it in many such cases. It often turns out that the parents themselves are highly competitive by nature (as the result of intense rivalries in their own early years) and are more ambitious for their child than they perhaps realize, more eager to have him excel. When he is playing childish games or roughhousing, they pay only a normal amount of attention. But when he shows an interest in reading at an early age, their eyes light up and they help him enthusiastically. The child senses their delight and responds with greater interest. He may be weaned away from the natural occupations of his age and turned into something of a scholar before his time.

Parents wouldn't be good parents if they weren't delighted

with their children's fine qualities. But it's necessary to distinguish between which are the children's interests and which are the parents' eager hopes. If parents who are naturally competitive can admit it honestly to themselves, and be on guard against using it to run their children's lives, the children will grow up happier, abler, and more of a credit to their parents in the end. This applies not only to early reading and writing but to putting pressure on a child at any age, whether it's in schoolwork, music lessons, dancing lessons, athletics, or social life.

342. Poor schoolwork because of "nervousness." All kinds of worries and troubles and family frictions can interfere with a child's schoolwork. Here are some examples, though they don't cover all the possibilities by any means.

A 6-year-old girl who is burned up with jealousy of a younger brother may be tense, "distracted," unable to pay attention, and make sudden attacks on other children for no good reason.

A child may be worried about illness at home or a threatened separation of the parents or misunderstandings about sex. In the early grades, especially, he may be afraid of a bully or a barking dog on the way to school, of the school janitor, of a severe-looking teacher, of having to ask permission to go to the toilet, of reciting before the class. These seem like small matters to an adult, but to a timid 6- or 7-year-old they may be terrifying enough to paralyze his thinking.

The child around 9 years who is nagged and corrected excessively at home may become so restless and tense that he can't keep his mind on anything.

The "lazy" child who won't try to do his lessons usually isn't lazy at all. The young animal of all species is born to be curious and enthusiastic. If he loses that, it's because it's been trained out of him. Children *appear* to be lazy in school for a number of reasons. One is balky from having been pushed too much all his life. You'll find him eager enough about his own private hobbies. Sometimes a child is afraid to try in school (or anywhere) for fear of failing. This may be because his family has always been critical of his accomplishments, or set too high standards.

Strange as it may seem, an occasional child may do poor schoolwork from being overconscientious. He keeps going over

the lesson that he's already learned or the exercises that he's already finished for fear that something is incomplete or incorrect. He's always behind, fussing.

The child who has been severely deprived of love and security in his early years typically reaches school age as a tense, restless, irresponsible creature with little ability to get interested in schoolwork or to get along with teachers or pupils.

Whatever the cause of a child's difficulty in school, the problem should be attacked from two directions. Try to find the underlying cause as suggested in Section 340. But whether or not you can discover what's bothering him inside, it should be possible for a teacher to use the interests and good qualities that he has already to draw him gradually into the group and the things they are working on.

343. **Poor reading because of left-right confusion.** To you and me the word "dog" looks entirely different from the word "god." But to some children, who don't have a clear sense of left and right, they look exactly the same, because each one spells the other backwards. This problem turns up most often when a class is using the newer method of learning to read, sometimes called "see and say." The teacher holds up a card with the word "dog" on it. The children learn that that means dog before they learn the letters that go into it. For most children this is a quicker and easier way to learn, and it has been adopted in many schools. However, a certain number of children, particularly boys, as soon as they have learned a number of words, begin to be confused between "dog" and "god," "was" and "saw," "on" and "no." This difficulty occurs more commonly in the child who is neither strongly right- or left-handed, or who has been changed from left to right by training. He is apt to get individual numbers and letters mixed up too. He can't tell the difference between a small *b* and *d*, he keeps on writing numerals backwards. (Many normal children show some reversal of letters and numbers at first but soon get straightened out with a little practice.)

The child who has left-right confusion needs to be discovered early (there are simple tests which show it), and given special help in learning to read. If he can't be tested in his own town, he should have a consultation in a child-guidance clinic

or with a private psychiatrist or psychologist in a near-by city. He should be taught by the old-fashioned spelling ("phonetic") method, preferably from special readers designed to overcome this handicap. If he doesn't have help, he's apt to get into more and more trouble. First he feels that he is not as bright as the other children. He develops a lasting hate on reading. Then he begins to dislike all schoolwork. He may even become a behavior problem at home.

344. **Helping a child in his lessons.** Sometimes a teacher advises that a child needs extra tutoring in a subject that he's falling behind in, or the parent has the idea himself. This is something to be careful about. If the school can recommend a good tutor that you can afford, go ahead. Generally speaking, a parent makes a poor tutor, not because he (or she) doesn't know enough, not because he doesn't try hard enough, but because he cares too much, is too upset when his child doesn't understand. If a child is already mixed up in lessons, a tense parent will be the last straw. Another trouble is that the parent's method may be different from that being used in the class. If a child is already baffled by the subject in school, the chances are that he will be *more* baffled when it's presented in a different way at home.

I don't want to go so far as to say that a parent should *never* tutor a child, because in an occasional case it works very well. I'd only advise a parent to talk it over thoroughly with the teacher first, and even then quit right away if it isn't a success.

What should you do if your child asks for help on his homework? If he is puzzled once in a great while and turns to you for clarification, there's no harm in straightening him out. (Nothing pleases a parent more than to have a chance occasionally to prove to his child that he really knows something.) But if a child is asking for help regularly, better consult the teacher. A good school prefers to help the child understand, and then let him rely on himself. If the teacher is too busy to straighten him out, you may have to lend a hand; but even then help him to understand his work, don't do it for him.

345. **The child who can't eat breakfast before going to school.** This problem comes up occasionally, especially with first and second graders, at the beginning of school in the fall.

It's the conscientious child who is so overawed by the big class and the sovereign teacher that he can't eat the first thing in the morning. If his mother forces him to, he is only too likely to vomit on the way to school or after he's there. This adds a feeling of disgrace to his other troubles.

The best way to handle this is to let the child alone at breakfast time; let him take only his fruit juice and milk if that is all he can comfortably swallow. If he can't even drink, let him go to school empty. It's not ideal for a child to start the day hungry, but he'll become relaxed and able to eat breakfast sooner if you leave him alone. Such a child usually eats fairly well at lunch, and then makes up for all he has missed with a huge supper. As he gets used to school and his new teacher, his stomach will gradually become hungrier at breakfast time, provided he hasn't had to struggle against his mother, too.

Even more important for the child who is timid at the beginning of school is for the mother to talk things over with the teacher so that the latter can understand and work to overcome the difficulty at school. The teacher can make a special effort to be friendly with the child, and help him, in the projects they are working on, to find a comfortable place in the group.

346. **Parent and teacher.** It's easy to get along with a teacher if your child is her pride and joy and doing perfectly in class. But if he is having trouble, the situation is more delicate. The best parent and the best teacher are both very human. Each has pride in the job she is doing. Each has a possessive feeling toward the child. Each secretly feels, no matter how reasonable she is, that the child would be doing better if the other would only handle him a little differently. It's helpful for the parents to realize at the start that the teacher is just as sensitive as they are, and that they will get further in a conference by being friendly and co-operative. Some parents realize that they are scared of facing a teacher, but they forget that just as often the teacher is afraid of them. The parents' main job is to give a clear history of the child's past, what his interests are, what he responds to well, what badly, and leave it to the teacher how best to apply this information in school. Don't forget to compliment her on the parts of the class program that are a great success with the child.

Puberty Development

IN GIRLS

347. Puberty development takes about two years. By puberty development I mean the two years of very rapid growth and development that come before "maturing." A girl is said to mature at her first monthly period. In the boy there is no such clear-cut event. So let's discuss puberty development in the girl first.

The first thing to realize is that there is no regular age at which puberty begins. The largest number of girls begin their development at around the age of 11 and have their first period about 2 years later, at 13. But a fair number begin their development as young as 9. Late developers may not even begin until 13. There are extreme cases of girls starting as early as 7 and as late as 15.

The fact that a girl starts her puberty development much younger or later than average usually doesn't mean that her glands aren't working right. It only means that she is working on what you might call a faster or slower timetable. This individual timetable seems to be an inborn trait. Parents who were late developers are more apt to have children who are late developers and vice versa.

Let's trace what happens in the case of the average girl who starts her puberty development at 11. When she was 7 or 8 years old, she was growing at the rate of 2 to 2½ inches a year. When she is 9 years old her rate of growing slows down to perhaps 1¾ inches a year. Nature seems to be putting on the brakes. Suddenly at about 11 the brakes let go. She begins to shoot up at the rate of 3 or 3½ inches a year for the next 2 years. Instead of putting on 5 to 8 pounds a year as she used to, she now gains between 10 and 20 a year, without becoming fatter. Her appetite becomes enormous to make this gain possible.

But other things are happening, too. At the beginning of this period her breasts begin to develop. First the areola (the dark area around the nipple) enlarges and gets slightly puffed out.

Then the whole breast begins to take shape. For the first year and a half it has a conical shape, but as the time of the first menstrual period nears it rounds out into more nearly a hemisphere. Soon after the breasts begin to develop, the pubic hair in the genital region starts to grow. Later hair appears in the armpits. The hips widen. The skin changes its texture.

348. **Psychologically there are changes, too.** As a result of all the physical, glandular, and emotional changes, the child's attention is apt to be drawn to herself. She becomes more self-conscious. She may exaggerate and worry about any defect. If she has freckles, she may think they make her look "horrible." A slight peculiarity in her body or how it functions easily convinces her that she is different or abnormal. She is changing so fast that she hardly knows who or what she is. She may not manage her new body as gracefully as she used to, and the same applies to her new feelings. She is apt to be touchy, easily hurt, when she's criticized. At one moment she feels like a grown-up woman-of-the-world and wants to have the world, including her family, treat her as such. The next moment she feels like a child again and expects to be protected and mothered. Her increased sexual feelings may bother her. She doesn't know at all clearly where they belong. She becomes intense and romantic in her attitudes toward people. But she is probably nowhere near the period where she can show these feelings toward a boy. She is more apt to develop a crush on a woman teacher or a heroine of fiction. This is partly because for years she has lived a way of life in which the girls stuck together and considered the boys their natural enemies. It's only gradually that these old antagonisms and barriers are broken down. Perhaps she first dares to think romantically of a movie actor. Eventually she can dream about a boy 2 years ahead of her in school. Even then it may be some time before she can show her friendliness to him face to face.

But let's get back to the physical side of the *average* girl's development. At 13 she has her first menstrual period. By now she has a woman's body. She has acquired most of the height and weight she will ever have. From this time on her growing slows down rapidly. In the year after her first period she will grow perhaps 1½ inches, and in the year after that perhaps ¾ of

an inch. In many girls the periods are irregular and infrequent for the first year or two. This is not a sign that anything is wrong; it only seems to represent the body's inexperience.

349. **Puberty begins at different ages.** We have been talking about the average girl, but only a certain number come near the average in any one particular. Many girls start their puberty development earlier than the average and many later. The child who begins at 8 or 9 is naturally more apt to feel awkward and self-conscious when she finds herself the only girl in her class shooting upward in size and acquiring the shape of a woman. This experience isn't painful to every early developer. It depends of course on how well adjusted she was before and on how ready and eager she is to grow up. The girl who gets along well with her mother and wants to be like her is inclined to be pleased when she sees she is growing up, whether or not she is ahead of her schoolmates. On the other hand, the girl who, for instance, because of jealousy of her brother has resented being a girl, or the child who is afraid to grow up, will be apt to be resentful or alarmed by early signs of womanhood.

Also bothered will be the girl on a slow timetable. The 13-year-old who has as yet shown no signs of puberty development has seen practically all her classmates grow rapidly taller and develop into women. She herself is still in the period of extra-slow growth which precedes the puberty spurt. She feels like an underdeveloped runt. She thinks that she must be abnormal. She needs to be reassured, to be told that her growth in height and her bodily development will be coming along just as surely as the sun rises and sets. If her mother and other relatives have been late developers, she needs to be told that, too, in explanation. She can be promised that when her time comes she will have 7 or 8 more inches of height before she stops growing altogether.

There are other variations besides the age at which puberty development begins. In some girls the pubic hair growth comes months before the breasts start to develop. And once in a while hair in the armpits is the earliest sign of change instead of being a late one. The length of time between the first signs of puberty development and the coming of the first period is usually about 2 years, but the girls who begin developing young are

apt to have a shorter, quicker period of development, occasionally less than a year and a half. On the other hand, the girls who begin their puberty development later than average are more apt to take longer than 2 years to reach their first menstrual period. Occasionally one breast begins to develop months before the other. This is fairly common and nothing to worry about. The earlier developing breast tends to stay larger throughout the puberty stage of development.

IN BOYS

350. The average boy starts two years later than the girl. The first thing to realize about puberty development in boys is that the *average* boy begins 2 years later than the average girl, at 13 in contrast to her 11. The earlier developers among boys begin as early as 11, a few younger still. Plenty of slow developers start as late as 15 and there are a few who wait longer. The boy may grow in height at double the rate he was growing before. The penis, the testicles, and the scrotum (the sac in which the testicles lie) all develop rapidly. Pubic hair begins to grow early. Later comes the hair in the armpits and on the face. The voice cracks and deepens.

At the end of about 2 years' time, the boy's body has fairly well completed its transition to that of a man. In the following 2 years he will creep up 2 or 2½ inches altogether and then practically stop.

The boy, like the girl, may go through a period of some physical and emotional awkwardness as he tries to gain control of his new body and new feelings. The way his voice keeps breaking down and up is an example of how he is both boy and man, and yet not either.

This is a good moment to mention the difficulties of social life in school during the period of puberty development and adolescence. The boys and girls in a class in school are of approximately the same age. And yet between the ages of 11 and 13, particularly, the average girl is 2 full years ahead of the average boy in development—towers over him in size, and is more grown-up in her interests. She's beginning to want to go to dances and be treated as if she were glamorous, while he is still an uncivilized little boy who thinks it would be shameful

to pay attention to her. During this whole period it is better for social functions to include different age groups for a better fit.

The boy who is on a slow timetable of development, who is still a "shrimp" at 15 when most of his friends have turned into grown men, needs reassurance even more than the slow-developing girl. Size and physique and athletic ability count for a lot



Adolescence comes at different ages.

at this age. What happens sometimes is that the boy, instead of being reassured that he will start developing in time and grow something like 7 or 8 inches in the process, is taken by his worried parents on a hunt for a doctor who will give gland treatment. This helps to convince him that something is really wrong with him. There are glandular preparations that will bring on the signs of puberty at whatever age they are given. But it seems wiser and safer, when the boy is normal, to let his inborn pattern unfold in its proper order.

351. Skin troubles in adolescence. Puberty changes the texture of the skin. The pores enlarge and secrete more oil. Blackheads are formed by the combination of oil and dust and dirt. These plugs enlarge the pores further. Then it is easy for ordinary germs to get in under a blackhead and cause a small infection or pimple.

Adolescent children have a tendency to be self-conscious anyway and to worry about any defects in their appearance. They fret about pimples and are apt to finger them and squeeze them. The trouble is that when a pimple is broken, the germs are spread in large numbers onto the surrounding skin and onto the fingers. Then when the child touches another part of his face he inoculates the germs into other blackheads and starts new pimples. Squeezing a pimple often makes it larger and deeper and therefore more likely to leave a scar. Some adolescents, worried about sex, imagine that their pimples are caused by guilty thoughts or masturbation.

Parents commonly accept their children's pimples fatalistically, assuming that nothing but time will bring a cure. This is too pessimistic a view. With modern methods of treatment, great improvement can be secured in many cases and some improvement in the others. A child is entitled to all the help he can get from his regular doctor or a skin specialist, for the sake of improving his present appearance and spirits, and to prevent the permanent scars that sometimes develop.

Whatever the specific methods are that the doctor prescribes, there are also general measures which are generally believed to be helpful. Vigorous daily exercise, fresh air, and direct sunshine seem to improve many complexions. The frequent eating of chocolate, candy, and other rich, sweet foods, is suspected of

favoring pimples, and it is worth while for the child to swear off these foods for a trial period anyway. It has been the common practice to recommend thorough washing of the face twice a day, though skin specialists have doubts about it in some cases. The usual procedure is to thoroughly but gently clean the face with a hot, soapy washcloth, followed by rinsing with hot and cold water. It is certainly important to make it clear to the child why he should keep his hands away from his face at all times, except when he is washing it, and why he should never squeeze a pimple. If a white head has formed which bothers him, he can soak it off with a piece of wet absorbent cotton, being careful not to spread the pus around when it breaks.

Another skin change at adolescence is a more profuse and strong-smelling perspiration in the armpits. Some children, and parents too, are not aware of the odor, but it may cause unpopularity with schoolmates. It calls for thorough daily washing with soap and, if this is not sufficient, advice from the doctor.

Problems of Feeding and Development

THIN CHILDREN

352. Thinness has various causes. Some children seem to be thin by heredity. They come from thin stock on one or both sides of the family. From the time they are babies they have been offered plenty to eat. They aren't sickly and they aren't nervous. They just never want to eat a great deal, especially of the rich foods.

A lot of children are thin because they are feeding problems due to urging (Section 355). Other children can't eat for other

nervous reasons. The child who is worrying about bogiemen, or death, or his mother's going away and leaving him, may lose a lot of his appetite. The jealous younger sister who is driving herself all day long to keep up with her older sister burns up a lot of energy and gives herself no peace at mealtime either. The tense, restless child who is bossed and scolded continually cannot relax enough at meals to have a good appetite. As you can see, the tense child is thinned out by a two-way process. His appetite is kept down and his restlessness uses up extra energy.

There are many children throughout the world who are malnourished because their parents can't find or afford the proper food. There are others whose parents could buy the right varieties of foods but don't because they know nothing about diet. There are a few chronic physical diseases which cause malnutrition. But children who become thin during an acute illness will usually recover their weight promptly if, during convalescence, they are not urged to eat until their appetites recover.

If your child is thin, don't try to change him by heaping more and more food on his dish, but take him to the doctor to make sure there is no disease, especially if his thinness is a recent development. If he is nervous, try to get at the roots of it by consultation with his teacher or a child-guidance clinic. If he has a feeding problem, try to undo it. And, finally, if he doesn't seem to be any kind of a problem, has been slender since infancy, but always gains a reasonable amount of weight each year, relax and let him alone. He is probably meant to be that way.

Sometimes an active child stays thin even though he eats large amounts of a well-balanced diet. In these cases where the appetite is excellent, you can sometimes slip in extra calories by means of cream or butter. Gradually add some cream to his milk, or use heavier cream for his cereal, or give him soups made partly with real cream. You can slowly add more butter to his vegetables, or encourage him to use more butter on his bread if he likes it. But you ought not to suddenly increase the fat. It may cause a stomach upset or take away a lot of appetite.

Adding cream or butter to the diet of a child with a *small* appetite sometimes helps to put on weight, but not very often. The trouble is that it usually reduces his appetite still further.

Then there is the child who is thin because he is restless and

nervous even though he eats well. There are two different ways to help him. The first and most important is to find out what is making him tense and try to overcome it. But at the same time you may be able to give him extra rest (Section 353).

Feeding between meals is helpful for those thin children whose stomachs never seem to want to take much at a time, but are quite willing to be fed often. (Section 248.)

353. **Extra rest.** If a child is getting overtired or failing to gain weight, he should go to the doctor for a check-up. Whether or not anything is wrong physically, it's important to think over his relations to parents, brothers, sisters, friends, and school. Get the help of the teacher if she is understanding. I think it's fair to say that fatigue comes as often from emotional troubles as from physical. Even if you have found the real cause of tiredness and are trying to correct it, you may want to give the child extra rest for the time being.

What rests one child makes another frantic, so you have to fit the program to the individual.

A plan that often works well, if it is practical, is to put the child to bed before supper and serve the supper in bed. To many children this will seem like a treat, at least for a few weeks, if it's presented as a privilege and not a punishment. Even if he hops out of bed from time to time, he will be getting more rest than if he were tearing around constantly. If you have time, read to him after supper to keep him anchored. When it's impractical to serve him supper in bed, he might at least go to bed right after supper for story-telling or radio listening or visiting with his father.

Another variation is staying in bed for breakfast and perhaps an hour afterwards. Or this can be combined with supper in bed.

The child who doesn't have to go to school in the afternoon and who refuses to lie down after lunch may be perfectly willing to stay indoors for an hour playing quietly, or helping the mother do housework or take care of the baby.

354. **A child who eats poorly needs a doctor's help.** Every feeding problem is different from every other. The child who is eating poorly needs a doctor's expert help: to examine him, to determine whether there is any disease to explain the loss of

appetite, to determine his state of nutrition, to evaluate the diet he *is* taking for what it provides and what it lacks, to recommend the substitute foods or medical preparations that will make up for what the child is missing, to advise on the handling not only of the feeding but of the child generally.

The discussion that follows is primarily for parents who will be unable to consult a physician temporarily or for some time.

355. **Where feeding problems begin.** Why do so many children eat poorly? Most commonly because so many mothers are conscientious about trying to make them eat well. You don't see many feeding problems in puppies, or among young humans in places where mothers don't know enough about diet to worry. You might say, jokingly, that it takes knowledge and many months of hard work to make a feeding problem.

One child seems to be born with a wolf's appetite that stays big even when he's unhappy or sick. Another's appetite is more moderate and is easily affected by his health and spirits. The first child seems to be cut out to be plump; the second is apparently intended to stay on the slender side. But *every* baby is born with enough appetite to keep him healthy, keep him gaining at the proper rate for him.

The trouble is that a child is also born with an instinct to get balky if he is pushed too hard, and an instinct to get disgusted with food that he's had unpleasant experiences with. There's one further complication: a person's appetite doesn't always go out to the same things. For a while he feels like eating a lot of spinach or a new kind of breakfast cereal. Next month it may not appeal to him. Some people always go in heavily for starches and sweets, others are "fed up" with a little bit. If you understand these points, you can see how feeding problems begin at different stages in a child's development. The baby becomes balky in his early months if his mother often tries to make him finish more of his bottle than he wants, or when the first solid food is introduced if he isn't given a chance to get used to it gradually. Many become more picky and choosy after the age of a year, because they aren't meant to be gaining so fast, because they are more opinionated, and perhaps because of teething. Urging them reduces the appeite further and more permanently. A very common time for feeding problems to be-

gin is at the end of an illness. If an anxious mother begins pushing food before the child's appetite returns, it quickly increases his disgust and gets it firmly fixed.

All feeding problems don't start from urging. A child may stop eating because of jealousy of a new baby, or worries of many kinds. But, whatever the original cause, the mother's anxiety and urging usually make it worse, and keep the appetite from returning.

Put yourself in the child's place for a minute. To get in the mood, think back to the last time you weren't very hungry. Perhaps it was a muggy day, or you were worried, or you had a stomach upset. (The child with a feeding problem feels that way most of the time.) Now imagine that a nervous giantess is sitting beside you, watching every mouthful. You have eaten a little of the foods that appeal to you most and have put your fork down, feeling plenty full. But she looks worried and says, "You haven't touched your turnips." You explain that you don't want any, but she doesn't seem to understand how you feel, acts as if you are being bad on purpose. When she says you can't get up from the table until you've cleaned your plate, you try a bit of turnip, but it makes you feel slightly sick at your stomach. She scoops up a tablespoonful and pokes it at your mouth, which makes you gag.

356. **A cure takes time and patience.** Once a feeding problem is established, it takes time and understanding and patience to undo. The mother has become anxious. She finds it hard to relax again as long as the child is eating poorly. And yet her concern and insistence are the main things that are keeping his appetite down. Even when she reforms, by a supreme effort, it may take weeks for the child's timid appetite to come back. He has to have a chance to slowly forget all the unpleasant associations with mealtime.

His appetite is like a mouse, and the mother's anxious urging is the cat that has been scaring him back into his hole. You can't persuade the mouse to be bold just because the cat looks the other way. The cat must leave him alone for a long time.

Dr. Clara Davis found that babies who hadn't built up any prejudices about foods naturally picked well-balanced diets in the long run when offered a variety of natural foods. But you

can't expect a child who has been fighting against certain foods —vegetables, for example—for months or years to suddenly turn to those foods just because his mother gives him a free choice. He might at a camp where everyone else is eating the vegetables, where he's hungry, and where no one cares whether he eats them or not. But at home those vegetables have too many associations in his mind. Just as soon as he sees them his spirit and his stomach say, "No!"

357. **Helping a child to want to eat.** The aim is not to *make* the child eat, but to let his natural appetite come to the surface so that he will want to eat. There are several sides to this program which will be taken up in the next few sections.

358. **Get your mind off his eating.** Try hard not to talk about his eating, either with threats or encouragement. I wouldn't praise him for taking an unusually large amount, or look disappointed when he takes little. With practice you should be able to stop thinking about it, and that's real progress. When he feels no more pressure, he can begin to pay attention to his own appetite.

359. **Be agreeable.** You sometimes hear the advice, "Put the food before the child, say nothing, take it away in 30 minutes, no matter how much or little has been eaten. Give nothing else until the next meal." This is fine if it's carried out in the right spirit—that is to say, if the mother is really trying not to fuss or worry about the child's eating and remains agreeable. But an angry mother sometimes applies the advice this way. She slaps the plate of dinner in front of the child saying grimly, "Now, if you don't eat this in 30 minutes, I'm going to take it away and you won't get a thing to eat until supper!" Then she stands glaring at him, waiting. This threatening hardens his heart and takes away any trace of appetite. The balky child who is challenged to a feeding battle can *always* outlast his mother.

You don't want your child to eat because he has been beaten in a fight, whether you have been forcing him or taking his food away. You want him to eat because he feels like eating.

360. **Start with the foods he likes best.** You want his mouth to water when he comes to meals so that he can hardly wait to begin. The first step in building up that attitude is to serve for weeks the foods he likes best (offering as balanced a diet as

possible), and to omit all the foods that he actively dislikes.

If your child has a limited feeding problem, dislikes only one or another group of foods but eats most kinds fairly well, read the Sections from 232 to 241. They explain how one food can be substituted for another for the time being, until a child's appetite swings around or until he loses his suspiciousness and tenseness at meals.

361. The child who likes few foods. A mother might say, "Those children who dislike just one type of food aren't real problems. Why my child likes only hamburgers, bananas, oranges, and soda pop. Once in a while he'll take a slice of white bread or a couple of teaspoonfuls of peas. He refuses to touch anything else."

This is an unusually severe feeding problem, but the principle is the same. You could serve him sliced bananas and a slice of enriched bread for breakfast; hamburger, 2 teaspoonfuls of peas, and an orange for lunch; a slice of enriched bread and more banana for supper. Let him have seconds or thirds of any of the foods, if he asks for them and you have them. Serve different combinations of this diet for days. Hold down firmly on his soda pop. If his stomach is awash with syrup, it will take away what little appetite he has for more valuable foods.

If, at the end of a couple of weeks, he is looking forward to his meals, add a couple of teaspoonfuls (not more) of some food that he sometimes used to eat—not one he hated. Don't mention the new addition. Don't comment if he leaves it. Try this one again in a couple of weeks, and meanwhile try another. How fast you go on adding new foods depends on how his appetite is improving and how he's taking to the new foods.

362. Make no distinctions between foods. Let him eat four helpings of one food and none of another if that's the way he feels (as long as the food is wholesome). If he wants none of the main course but wants his dessert, let him have his dessert. in a perfectly matter-of-fact way. If you say, "No seconds on meat until you've eaten your vegetable," or "No dessert until you've cleaned your plate," you further take away his appetite for the vegetable or the main course, you increase his desire for meat or dessert. These results would be the exact opposite of what you want.

It's not that you want your child to go on eating lopsided meals forever. But if he has a feeding problem and is already suspicious of some foods, your best chance of his coming back to a reasonable balance is to let him feel that you do not care.

I think it's a great mistake for the parent to insist that a child who is a feeding problem eat a small serving or "just a taste" of a food he dislikes or is suspicious of, as a matter of duty. If he has to eat anything that disgusts him, even slightly, it lessens the chance that he will ever change his mind and like it. And it lowers his enjoyment of mealtimes and his general appetite for all foods by one more degree.

Certainly never make him eat at the next meal food that he refused at the last meal. That's looking for trouble.

363. **Serve less than he will eat, not more.** For any child who is eating poorly, serve small portions. If you heap his plate high, you remind him of how much he is going to refuse and you depress his appetite. But if you give him a first helping that is less than he will be willing to take, you encourage him to think, "That isn't enough." You want him to have that attitude. You want him to get to think of food as something he himself is eager for. If he has a *really* small appetite, serve him miniature portions: one teaspoonful of meat, one teaspoonful of vegetable, one teaspoonful of starch. When he finishes, don't say, eagerly, "Do you want some more?" Let him ask, even if it takes several days of miniature portions to give him the idea.

364. **Getting him to feed himself.** Should the mother feed a poor eater? A child who is given proper encouragement (Section 217) will take over his own feeding somewhere between 12 and 18 months. But if an overworried mother has continued to feed him until the age of 2 or 3 or 4 (probably with a lot of urging), it won't solve the problem simply to tell her, "Stop!" The child will now have no desire to feed himself; he takes being fed for granted. To him it's now an important sign of his mother's love and concern. If she stops suddenly, it will hurt his feelings, make him resentful. He is likely to stop eating altogether for 2 or 3 days—and that's longer than any mother can sit by doing nothing. When she feeds him again, he has a new grudge against her. When she tries another time to give up feeding him, he knows his strength and her weakness.

A child of 2 or more should be feeding himself as soon as possible. But getting him to do it is a delicate matter that will take several weeks. You mustn't give him the impression that you are trying to take a privilege away. You want him to take over because he wants to.

Serve him his favorite foods meal after meal and day after day. When you set the dish before him, go back to the kitchen or into the next room for a minute or two, as if you had forgotten something. Be away a little longer each day. Come back and feed him cheerfully with no comments, whether or not he has taken anything himself. If he gets impatient while you are in the next room and calls you to come and feed him, come right away, with a friendly apology. He probably won't progress steadily. In a week or two he may get to the point of eating one meal almost entirely himself, and the next meal want to be fed from the beginning. Don't argue at all during this process. If he eats one food, don't urge him to try another, too. If he seems pleased with himself for doing a good job of self-feeding, compliment him on being a big boy, but don't be so enthusiastic that he smells a rat.

Suppose for a week or so you have left him alone with good food for as long as 10 or 15 minutes and he's eaten nothing. Then you ought to make him hungrier. Gradually, in 3 or 4 days, cut down to half what you customarily fed him. This should make him so eager that he can't help starting in himself, provided you are being tactful and friendly.

By the time the child is regularly feeding himself as much as half a meal, I think it's time to encourage him to leave the table, rather than for you to feed him the rest of the meal. Never mind if he has left out some of his foods. The hunger will pile up and soon make him eat more. If you go on feeding him the last half of the meal, he may never take over the whole job. Just say, "I guess you've had enough." If he asks you to feed him some more, give him 2 or 3 more mouthfuls to be agreeable and then suggest casually that he's through.

After he has taken over completely for a couple of weeks, don't slip back into the habit of feeding him again. If some day he's very tired and says, "Feed me," give him a few spoonfuls absent-mindedly, and then say something about his not being

very hungry. I make this point because I know that a mother who has worried for months or years about a child's eating, who spoon-fed him much too long, and finally let him feed himself, has a great temptation to go back to feeding him again the first time he loses his appetite or the first time he is sick. Then the job has to be done all over again.

365. **Should the mother stay in the room** while he is eating? This depends on what the child is used to and wants, and how well the mother can control her worry. If she has always sat there, she can't suddenly disappear without upsetting him. If she can be sociable, relaxed, and get her mind off the food, it's fine for her to stay (whether or not she is eating her own meal). If she finds that even with practice she can't get her mind off the child's eating, or stop urging him, it may be better for her to retire from the picture at mealtime, not crossly, not suddenly, but tactfully and gradually, a little more each day, so that he doesn't notice the change.

366. **No acts or bribes.** Certainly the parents shouldn't be putting on acts to bribe the child to eat, such as a little story for every mouthful, or a promise from father to stand on his head if the spinach is finished. All this kind of persuasion seems at the moment to be making the child eat a few more mouthfuls. But in the long run it takes his appetite away more and more. The parents have to keep raising the bribe to get the same results. They end up putting on an hour's exhausting vaudeville for five mouthfuls.

Don't ask a child to eat to earn his dessert, or a piece of candy, or a gold star, or any other prize. Don't ask him to eat for Aunt Minnie, or to make his mother happy, or to grow big and strong, or to keep from getting sick, or to clean his plate. You can state the rule more briefly: Don't ask a child to eat.

There is no great harm in a mother's telling a story at supper-time, or playing the radio if that has been the custom, as long as it is not connected in any way with whether the child is eating or not.

367. **It isn't necessary to be a doormat.** I have said so much about letting a child eat because he wants to, that I may have given the wrong impression to some parents. I remember a mother who had been snarled up for years in a feeding prob-

lem in her 7-year-old daughter, urging, arguing, forcing. When she understood the idea that the child probably had, underneath, a normal appetite and a desire for a well-balanced diet, and that the best way to revive it was to stop battling over meals, she swung to the opposite extreme and became apologetic. The daughter by this age had a lot of resentment in her from the long struggle. As soon as she realized that her mother was all meekness, she took advantage of her. She would pour the whole sugar bowl on her cereal, watching out of the corner of her eye to see her mother's silent horror. The mother would ask her before each meal what she wanted. If the child said, "Hamburger," she obediently bought and served it. Then the child, as like as not, would say, "I don't want hamburger, I want frankfurters," and the mother would run over to the butcher to get it.

There's a middle ground. It's reasonable for a child to be expected to come to meals on time, to be pleasant to other diners, to refrain from making unpleasant remarks about the food or declaring what he doesn't like, to eat with the table manners that are reasonable for his age. It's fine for the mother to take his preferences into account as much as is possible (considering the rest of the family) in planning meals, or to ask him occasionally what he would like, as a treat. But it's bad for him to get the idea that he's the only one to be considered. It's sensible and right for the mother to put a limit on sugar, candy, sodas, cakes, and others of the less wholesome foods. All this can be done without argument as long as the mother acts as if she knew what she was doing. In other words, you can follow the wise course of never giving your child the feeling that you want him to eat, and yet hold him to reasonable behavior in other respects.

368. **Get help if you aren't succeeding.** I have emphasized the important points in helping a child over a feeding problem. They should work in the right direction. But they will not surely bring every child around to a well-balanced diet. I said at the start that the only safe way to treat a feeding problem is with a doctor's help. If you have had to get along without this assistance temporarily, and if your child after a period of weeks is

still taking an inadequate or lopsided diet, you should make more of an effort to reach a physician.

FAT CHILDREN

369. The treatment depends on the cause. Many people think the cause is gland trouble, but actually this is rarely the case. There are several factors that make for overweight, including heredity, temperament, appetite, happiness. If a child comes from a stocky line on both sides of the family, there is a greater chance of his being overweight. The placid child who takes little exercise has more food calories left over to store in the form of fat. The most important factor of all is appetite. The child who has a tremendous appetite that runs to rich food like cake, cookies, and pastry, is naturally going to be heavier than the child whose taste runs principally to vegetables and fruits and meats. But this only raises the question of why one child *does* crave large amounts of rich foods. We don't understand all the causes of this, but we recognize the child who seems to be born ("constitutionally") to be a big eater. He starts with a huge appetite at birth and never loses it afterwards, whether he's well or sick, calm or worried, whether the food he's offered is appetizing or not. He's fat by the time he's 2 or 3 months old and stays that way at least through childhood.

Of the excessive appetites that develop later in childhood some at least are due to unhappiness. This happens, for instance, around the age of 7 in children who are somewhat unhappy and lonely. It is the period when the child is drawing away from his close emotional dependence on his parents. If he doesn't have the knack of making equally close friendships with other children, he feels left out in the cold. Eating sweet and rich food seems to serve him as a partial substitute. Worries about schoolwork or other matters sometimes make a child seek comfort in overeating too. Overweight sometimes develops during the puberty stage of development, especially in unhappy children. The appetite normally increases at this time to take care of the increased rate of growth, but it's probable that loneliness plays a part in some cases, too. It is the period when the child may become more turned-in and self-conscious because

of all the changes he is experiencing, and this may lessen his ability to get along enjoyably with his fellows.

Obesity may become a vicious circle, no matter which factor caused it in the beginning. The fatter the child, the harder it is for him to enjoy exercise and games. And the quieter he is, the more energy his body has to store as fat. It's a vicious circle in another way, too. The fat child who can't comfortably enter into games may come to feel more of an outsider, and he is liable to be kidded and ridiculed.



Fatness is complicated.

What is there to do about a fat child? Right away you would say "diet him." It sounds easy, but it isn't. Think of the grown-ups you know who are unhappy because of their weight and who still aren't able to stick to a diet. A child has less will power than an adult. If the mother just serves the child the less fattening foods, it means either that the whole family must go without the richer dishes, or that they must keep the fat child from eating the very things his heart craves most while they enjoy them. There are very few fat children reasonable enough to think that that's fair. The feeling of being treated unfairly may further increase the craving for sweets. Whatever is accomplished in the dining room may be undone at the icebox or candy-store between meals.

But the prospects of dieting are not as black as I have made out. A tactful mother can do a good deal to keep temptation away from her fat child without making an issue of it. She can serve rich desserts less frequently. She can stop having cakes and cookies always around in the kitchen, and provide fresh and dried fruit for between-meal nibbling. She can serve frequently the less fattening foods that are his favorites. If the child shows any willingness to co-operate in his diet, he should certainly be encouraged to visit the doctor, preferably alone. Talking to the doctor, man to man, may give him the feeling of running his own life like a grownup; anyone can take dietary advice better from an outsider. A child should never take any medicine for reducing without a doctor's recommendation, and unless he can return at *regular* intervals for check-up.

Since overeating is often a symptom of loneliness or maladjustment, the most constructive thing is to make sure that the child's home life, schoolwork, and social life are as happy and satisfying as possible (Section 325).

370. Dieting should be supervised by a doctor. Self-dieting sometimes becomes a problem and a danger in the adolescent period. A group of girls will excitedly work themselves up to going on some wild diet that they have heard about. Within a few days, hunger makes most of them break their resolutions, but one or two may persist with fanatical zeal. Occasionally a girl loses alarming amounts of weight and can't resume a normal diet even when she wants to. The group hysteria about dieting seems to have awakened in her a deep revulsion against food, which is usually a hangover from some unsolved worry of early childhood. Another girl in the early stages of puberty will declare, hectically, "I'm getting *much* too fat," even though she is so slender that her ribs are showing. She may be emotionally unready to grow up and secretly disturbed by the development of her breasts. The child who is not obese, but becomes obsessed with dieting should have the help of a children's psychiatrist.

Any child who, himself, or whose parents think he should be on a diet ought to consult a doctor, for a number of reasons. The first is to determine whether dieting is necessary or wise. Secondly, the adolescent is more apt to accept the doctor's advice

than his parents'. If it is agreed that a diet is wise, it should certainly be prescribed by the doctor. He will take into account the child's food tastes, the family's usual menus, in order to work out a diet which is not only sound nutritionally but is practical in that particular home. Finally, since weight loss puts some strain on health, anyone who is planning to reduce should be examined at regular intervals to make sure that the rate is not too fast and that he remains strong and healthy.

In those situations where it is not possible to have the supervision of a doctor, the parents should insist that a child who has the bit in his teeth must take at least the following foods daily: a pint and a half of milk, meat or poultry or fish, an egg, a green or yellow vegetable, fruit twice. The child can be assured that these foods in reasonable servings will not cause weight gaining and that they are essential to prevent the muscles, bones, and organs of his body from being dangerously depleted.

Rich desserts can be omitted without risk, and should be, by anyone who is obese and trying to reduce. The amount of plain, starchy foods taken (cereals, breads, potatoes) is what will determine, in the case of most people, how much they gain or lose. Any growing child will need *some*, even though he is trying to lose weight. It is not wise for even a fat person to lose more than a pound a week, unless a doctor is carefully supervising.

GLANDS

371. Glandular disturbances. There are several definite glandular diseases and there are a few glandular medicines which have a definite effect on human beings. For example, when the thyroid gland is not secreting sufficiently, a child's physical growth and mental development is definitely slowed down. He is sluggish, has a dry skin, coarse hair, and a low voice. He may be somewhat obese. His "basal metabolism," which means the rate at which his body burns fuel when resting, will be below normal. The proper dose of thyroid medication will bring about remarkable improvement.

Some people who have read popular articles on glands assume that every short person, every slow pupil, every nervous girl, every fat boy with small genitals, is merely a glandular problem who can be cured by the proper tablet or injection.

This enthusiasm is not justified by what is known scientifically at the present time. It takes more than one symptom to make a glandular disease.

In many cases when a boy is heavy during the years before puberty development, his penis *appears* smaller than it really is because his plump thighs are so large in comparison, and because the layer of fat at the base of his penis may hide three-quarters of its length. Most of these boys have a normal sexual development at puberty, and many of them lose their excess weight at that time. See Sections 303 and 372 on the harm of worrying a boy about his genitals.

Certainly every child who is not growing at the usual rate or in the usual shape, or who appears dull or nervous or out of line in any other way, should be examined by a competent physician. But if the doctor finds that the child's stature is only his inborn "constitutional" pattern, or that his mental state is due to real troubles in his daily life, then what he needs is assistance in his adjustment to life, not further search for magic.

UNDESCENDED TESTICLES

372. Undescended testicles. In a certain number of newborn boys, the testicles are not in the scrotum (the pouch where the testicles normally lie), but are farther up in the groin or inside the abdomen. Some of these undescended testicles come down into the scrotum soon after birth. A great majority of the rest of them descend during the stage of puberty development, which begins in the average boy about 13. There are only a very few cases where the testicles don't ever come down by themselves, and in these there is some obstruction or abnormality.

The testicles are originally formed inside the abdomen and move down into the scrotum only shortly before birth. There are muscles attached to the testicles which can jerk them back up into the groin, or even back into the abdomen. This is to protect the testicles from injury when this region of the body is struck or scratched. There are lots of boys whose testicles withdraw on slight provocation. Even chilling of the skin from being undressed may be enough to make them disappear into the abdomen. Handling the scrotum in an examination fre-

quently makes them disappear. Therefore, a parent shouldn't decide that the testicles are really undescended just because they are not usually in sight. A good time to look for them is when the boy is in a hot bath, without handling his body.

Sometimes just one testicle is found in the normal position. There is no need for concern during childhood in this case, because one testicle is sufficient to make a boy develop properly and become a father, even in the unusual case where the other one doesn't appear later.

Testicles that have been seen at any time in the scrotum, even if only rarely, need no treatment because they will surely settle down in the scrotum by the time puberty development is under way.

If the testicles have *never* been seen, it is sometimes recommended that injections of glandular material be given which make the genitals grow, temporarily, just as if the boy had reached the stage of natural puberty development. If a boy's testicles are the kind which will surely come down during puberty, they will respond to the injections, too, proving that there is no obstruction or other abnormality. This treatment or test, which is a kind of temporary, artificial puberty, is usually not given until the boy is at least 10 years old, so that he will be more nearly ready for the physical and emotional changes that occur. However, in some cases it is considered wiser, particularly from the psychological point of view, not to cause this artificial puberty, even temporarily, but to wait to see whether natural puberty will not bring the testicles down.

In the rare cases of testicles (either one or both) which do not descend with injections or at natural puberty, operation is usually recommended, either before or soon after puberty development begins. It is believed that testicles that are left in the abdomen after puberty is well along will not function properly and may cause trouble.

If your child appears to have undescended testicles, don't worry yourself and don't worry him. It is important that the child should not be made self-conscious by anxious looks and frequent examinations. It is really harmful to a boy's emotional development to get the idea that he is not formed properly. If glandular injections are recommended, this treatment should

be spoken of casually by the parents, in a way that will raise the least doubts in the boy's mind.

POSTURE

373. The treatment of bad posture depends on the cause. Good or bad posture is made up of a number of factors. One—perhaps the most important—is the skeleton the child is born with. You see individuals who have been round-shouldered from babyhood, like their fathers before them. Some children seem to be born with a relaxed set of muscles and ligaments. They run to knock-knees no matter how much vitamin D you give them. Another child looks tightly knit, in action or at rest. It's hard for him to slump. There are diseases that affect posture, such as rickets, infantile paralysis, and tuberculosis of the bones. Chronic illness and chronic fatigue, from any cause, that keep a child under par may make him slump and sag. Overweight sometimes produces sway-back, knock-knees, and flat feet. Unusual tallness makes the self-conscious adolescent duck his head. A child with poor posture needs regular examinations to make sure that there is no physical disease.

Many children slouch because of lack of self-confidence. It may result from too much criticism at home, or from difficulties in school, or from an unsatisfactory social life. The person who is buoyant and sure of himself shows it in the way he sits and stands and walks. When parents realize how much feelings have to do with posture, they can handle it more wisely.

The natural impulse of a parent, eager to have his child appear well, is to keep after his posture. "Remember the shoulders." "For goodness' sake, stand up straight." But the child who is stooped over because his parents have always kept after him too much won't be improved by more nagging. Generally speaking, the best results come when he receives posture work at school, or in a posture clinic, or in a doctor's office. In these places the atmosphere is more businesslike than at home. The parents may be able to help him greatly in carrying out his exercises at home, if he wants it and if they can do it in a friendly way. But the main job for them is to help the child's spirit by aiding his school adjustment, fostering a happy social life, and making him feel adequate and self-respecting at home.

Illness

CARE OF A SICK CHILD

374. Finding a doctor in a strange city. If you need a doctor for your child in a strange town, find the name of the best hospital. Telephone, and ask for the name of a pediatrician on the staff, or a general practitioner who takes care of children. If there is any hitch, ask to speak to the physician-in-chief (who will probably not be a children's specialist). He will give you the names of one or two suitable doctors.

375. Things to have in your medicine cabinet. A box of sterile gauze squares, or "dressings," 3 inches square (each dressing remains sterile in a separate envelope). Two rolls of sterile bandage 2 inches wide, two rolls 1 inch wide. A roll of sterile absorbent cotton. A roll of adhesive plaster 1 inch wide. You can make narrower strips by cutting the end with scissors and then tearing. A box of small prepared bandages. A piece of waterproof silk or other material to cover wet dressings. A pair of tweezers or "forceps" (a good pair of splinter forceps is the most useful variety).

Ask your doctor what antiseptic he recommends. (If you can't ask now, get a 1-ounce bottle of tincture of metaphen, 1 to 200 solution.) A package of bicarbonate of soda (baking soda). A tube or jar of petroleum jelly or some other preparation that your doctor recommends for the emergency treatment of burns. A bottle of 5-grain aspirin tablets. If you live far away from medical help ask your doctor if he recommends your having a bottle of syrup of ipecac for severe croup or to cause vomiting in a case of serious poisoning.

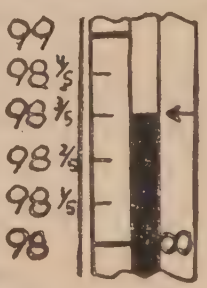
A thermometer, rectal for children under 6. A hot-water bottle. A rubber ear syringe, preferably with a soft rubber tip, for a baby's enema if your doctor prescribes it.

376. **What's fever and what isn't?** Taking the temperature is a bugaboo to many mothers. They find a thermometer hard to read. They are confused by the difference between mouth and rectal temperature.



It might be easier to get someone else to show you how to read one, but here goes. Most thermometers are engraved the same. They have a long mark for each degree and a short mark for each fifth of a degree. Only the even degrees, 94, 96, 98, 100, 102, 104, are numbered on the thermometer, because of lack of space. There is an arrow pointing to the "normal" mark, 98 3/5. Many thermometers are marked in red above the normal point.

The first thing to realize is that a healthy child's body temperature doesn't stay fixed at 98 3/5. It is always going up and down a little, depending on the time of day and what the child is doing. It's usually lowest in the early morning and highest in the late afternoon. This change during the day is only a slight one, however. The change between rest and activity is greater. The temperature of a perfectly healthy small child may be 99 3/5 or even 100 degrees right after he has been running around. (On the other hand, a temperature of 101 degrees probably means illness whether the child has been exercising or not.) The older child's temperature is less affected by activity. All this means that if you want to know whether your child has a slight fever due to illness, you must take his temperature after he has been really quiet for an hour or more.



In most feverish illnesses the temperature is apt to be highest in the late afternoon and lowest in the morning. But there is nothing to be surprised at if a fever is high in the morning and low in the afternoon. There are a few diseases where the fever, instead of climbing and falling, stays high steadily. The commonest of these are pneumonia and roseola

infantum. A below-normal temperature (as low as 97 degrees) sometimes occurs at the end of an illness, and also in healthy babies and small children on winter nights. This is no cause for concern as long as the child is feeling well.

Now about the difference between mouth and rectal temperatures. Every part of the body has a different temperature. The trunk is warmest, because it is thick through and protected by clothing. A child's temperature is taken by rectum until about the age of 5 or 6, because he can't keep a thermometer under his tongue and because he might bite it. The rectal temperature will be a little higher than the mouth temperature, but it's usually not a full degree higher. It's nearer half a degree.

The only difference between a mouth and a rectal thermometer is in the shape of the bulb. The bulb of the rectal thermometer is round so that it won't be so sharp. A mouth thermometer has a long slender bulb so that the mercury can be warmed more quickly by the mouth. The markings on the two thermometers are exactly the same and mean the same thing. (In other words, they are not marked differently to allow for the difference of temperature between the mouth and rectum.) You can use a clean rectal thermometer perfectly well in the mouth, and a mouth thermometer in the rectum if used gently.

Most thermometers register well enough in a minute in the rectum. If you will watch a thermometer sometime when it is in a baby's rectum, you can see that it goes up very rapidly at first. It gets within a degree of where it is going to stop in the first 20 seconds. After that it barely creeps up. This means that if you are nervous taking the temperature of a struggling baby, you can take the thermometer out in less than a minute and have a rough idea what the temperature is.

It takes longer to register the correct temperature in the mouth—a minute and a half or two minutes. This is because it takes the mouth itself a while to warm up after being open and because the bulb is partly surrounded by air.

377. **Taking the temperature.** Before taking a temperature, shake the thermometer down. You hold the upper end of the thermometer (the opposite end from the bulb) firmly between your thumb and finger. Now shake the thermometer vigorously, with a sharp, snapping motion. You want to drive the mercury

down at least as far as 97 degrees. If it doesn't go down, you aren't snapping hard enough. Until you get the hang of it, shake the thermometer over a bed or couch. Then if it slips out of your hand, it won't be broken. The bathroom is the worst place of all to shake a thermometer, because of the hard surfaces.



If you are taking a rectal temperature, dip the bulb of the thermometer into petroleum jelly or cold cream. The best position to put a baby in is on his stomach across your knees. He can't squirm out of this position very easily, and his legs hang down out of the way. Insert the thermometer gently into his rectum. Push it in with a light touch, letting the thermometer find its own direction. If you hold it stiffly it may poke him inside. Once the thermometer is in, it is better to shift your grip off the end of the thermometer, because if the baby struggles, the twisting might hurt him. Instead, lay the palm of your hand across his buttocks, lightly holding the thermometer between two of the fingers, the way you'd hold a cigarette.

You can also take the temperature easily, especially when the child is old enough to lie still, with him lying on his side on a bed with his knees drawn up a little. It is harder to find the

rectum when a child is lying flat on his stomach. The worst position is with the child lying on his back. It is hard to get to his rectum and his feet are in position to kick your hand accidentally or on purpose.

Reading the thermometer is very easy, once you get the knack. Most thermometers are somewhat triangular in shape, with one edge sharper than the rest. This sharp edge should point toward you. In this position the marks of the degrees are above and the numbers are below. Between them is the space where the mercury shows. Roll the thermometer very slightly until you see the band of mercury. Don't worry too much over





the fractions of degrees. It makes little difference if the temperature is 99 4/5 or 99 3/5 degrees. What the doctor will be interested in is *about* what the temperature is. When you report the temperature to the doctor tell him what the thermometer actually says, and then add "by mouth" or "by rectum." I say this because sometimes a mother, who has the mistaken idea that the mouth temperature is the only correct one, will take a temperature by rectum and then tell the doctor what she figures the mouth temperature would be. Usually the best times to take the temperature are in the first part of the morning and late in the afternoon.

The next question is how many days to go on taking the temperature. Here is what happens occasionally. A child has a bad cold with fever. The doctor visits regularly and has the mother take the temperature twice a day. Finally the fever is gone, the child is convalescing well, has only a mild cough and running nose. The doctor finds everything satisfactory at his last examination, tells the mother to let the child outdoors as soon as the cold is gone completely. Two weeks later the mother telephones to say that she and the child are getting desperate staying indoors, that the running nose and cough have been completely gone for 10 days, that the child looks and eats wonderfully, but that the "fever" is still going to 99.6 degrees each afternoon. As I explained earlier this is not necessarily a fever in an active child. The 10 days of staying indoors and of worrying over the

temperature have all been a waste and a mistake. When the temperature has stayed under 101 degrees for a couple of days, it's a good general rule to forget about the thermometer, unless the doctor asks you to continue, or unless the child seems sicker in any way. Don't get in the habit of taking a child's temperature when he is well.

378. Emergency treatment of high fever. Between the ages of 1 and 5 years, children may develop fever as high as 104 degrees (sometimes even higher) at the onset of mild infections such as colds, sore throats, grippe, just as often as with serious infections. On the other hand, a dangerous illness may never have a temperature higher than 101 degrees. So don't be influenced too much, one way or the other, by the height of the fever, but get in touch with the doctor whenever your child appears sick in any way.

If on the first day of an illness a child's temperature is 104 degrees or higher, and if it will be an hour or more before you can speak to the doctor, even on the telephone, it's wise, as an emergency measure, to bring the fever down a little with an alcohol rub. Mix equal parts of rubbing alcohol ("95 percent alcohol," "grain alcohol," or "ethyl alcohol" will do just as well) and water. Gently rub the child's arm with this mixture for a minute or two. Then in turn rub the other arm, each leg, the chest, the back. The rubbing is to bring the blood to the surface. The evaporation of the alcohol and water cools it. If you have no alcohol, plain water will do. Take the temperature again in half an hour. If it is still over 104 degrees, give half a tablet of aspirin and repeat the rub. You prefer to keep the temperature under 104 degrees until the doctor comes, because a small child who develops a sudden high fever the first day of an illness may become trembly or even have a convulsion (See Section 450). When a child's fever is very high and he is flushed, use only light covers at ordinary room temperature, perhaps as little as a sheet. You can't get his temperature down very well if he's heavily covered. Naturally, if he feels chilly he needs more covers.

Many parents assume that the fever itself is bad and want to give medicine to bring it way down, no matter what degree it is. But it's well to remember that the fever is not the disease. The

fever is one of the methods the body uses to help overcome the infection. It is also a help in keeping track of how the illness is progressing. In one case the doctor wants to bring the fever itself down because it is interfering with the child's sleep or exhausting him. In another case he is quite willing to leave the fever alone, and concentrate on curing the infection.

379. **Giving medicine.** It's sometimes quite a trick getting a child to take his medicine. The first rule is to slip it into him in a matter-of-fact way, as if it had never occurred to you that he wouldn't take it. If you go at it apologetically, with a lot of explanation, you will convince him that he's expected to dislike it. Be talking about something else when you put the spoon in his mouth. Most young children will open their mouths automatically, like birds in their nest.

Tablets that don't dissolve, like aspirin and the "sulfa" drugs, can be crushed to a fine powder and mixed with a coarse, good-tasting food like applesauce. Mix the medicine with only one teaspoonful of the applesauce, in case he decides he doesn't want very much. Bitter pills can be mixed in a teaspoonful of sugar and water, or honey, or maple syrup, or jam.

When giving medicine in a drink, it's safer to choose an unusual fluid that the child does not take regularly, such as grape juice or prune juice. If you give a queer taste to his milk or his orange juice, you may make him suspicious of them for months.

Getting a small child to swallow a whole tablet or a capsule is difficult. Try putting it in something lumpy and sticky like banana and follow the teaspoonful quickly with a drink of something he likes.

380. **Don't give medicine without a doctor's advice** and don't continue it without keeping in touch with him. Here are some examples of why not. A child had had a cough with his last cold, and the doctor had prescribed a certain cough medicine. Two months later he developed a new cough, and the mother had the prescription renewed without consulting the doctor. It seemed to help for a week, but then the cough became so bad that she had to call the doctor anyway. He realized right away that the disease this time was not a cold but whooping cough. He would have suspected it a week before if he had been consulted. In that case the child could have been isolated immedi-

ately and would not have exposed unnecessarily a lot of other children.

A mother who has treated colds or headaches or stomach-aches a few times in the same way comes to feel like an expert, which she is in a limited way. But she's not trained, as a doctor is, to first consider carefully what the diagnosis is. To her two different headaches (or two stomach-aches) seem about the same. To the doctor one has an entirely different meaning from the other and calls for different treatment. People who have been treated by a doctor with one of the "sulfa" drugs are sometimes tempted to use it again themselves for similar symptoms. They figure that it produces wonderful results, is easy to take, and they know the dosage from the last time—so why not?

Serious reactions can occur from the use of these drugs, such as bleeding from the kidneys, obstruction to the flow of urine, sudden anemia, destruction of the white blood cells, rashes, and fevers. These complications fortunately are rare, but they are more likely to occur if the drugs are not used properly. That is why the drugs should be used only when a doctor has decided that the danger from the disease and the likelihood of benefit from the medicine outweigh the risks of treatment. Even then the urine should be watched for blood, and to be sure that the amount of urine is not decreasing. Blood counts should be done at certain intervals.

Cathartics (drugs to make the bowels move) should also not be used for any reason—especially for stomach ache—without consulting a doctor. Some people have the mistaken idea that stomach ache is frequently caused by constipation, and want to give a cathartic first of all. There are many causes of stomach ache (see sections 440-442). Some, such as appendicitis and obstruction of the intestines, would be made worse by a cathartic. Therefore, since you don't know for sure what is causing your child's stomach ache, it is dangerous to give a cathartic.

381. Enemas. A doctor sometimes recommends an enema when a child becomes suddenly constipated, particularly if he is sick. During some illnesses an enema is safer than a cathartic given by mouth, because it will not cause vomiting or irritate the small intestines. When a small child has been holding back

on a hard movement for fear it will hurt, an enema is often necessary as an emergency measure to soften up the hard mass. However, he is apt to dread and fight against the enema. So it is necessary to get advice from the doctor promptly about treating the constipation from the mouth end, to avoid more enemas (see Section 107).

A doctor occasionally recommends an enema (*after* making the diagnosis) for severe gas pains, as in three-month colic or after an operation, but it's unwise for a parent to decide to give an enema for any stomach-ache (even though the enema is less dangerous than a cathartic in these conditions).

Enemas, in other words, should be used only on special occasions with a doctor's advice. It is wrong physically and psychologically for a parent to get in the habit of giving a child regular enemas. They do not cure a tendency to constipation; in fact, they may make it worse. And they tend to focus his mind on his bowels and make him a hypochondriac.

The doctor will tell you what to put in the enema. A soapsuds enema is made by stirring a piece of mild toilet soap in the water until it is slightly sudsy. This is slightly irritating and is less often given to an infant. Enemas can also be made with a half teaspoonful of table salt, or a teaspoonful of bicarbonate of soda, added to an 8-ounce cup of water. The water should be at about body temperature. You can give 4 ounces to a small infant, 8 ounces to a one-year-old, a pint to a 5-year-old.

Place a waterproof sheet on a bed and lay a bath towel over it. Have the child lie on this on his side with his legs pulled up. Have a potty close at hand.

For an infant or small child it is easiest and safest to use a rubber ear syringe with a soft tip of the same material. Fill the bulb completely, so that you won't be injecting air. Grease the tip with petroleum jelly, cold cream, or soap, gently insert it an inch or two. Squeeze the bulb slowly and not too forcibly. The slower you put it in, the less likely it is to make the baby feel uncomfortable and expel it. The bowel contracts and relaxes in waves. If you feel a strong resistance wait until it "gives" rather than push harder. Unfortunately, a baby is apt to push as soon as he feels something in his anus, so you may not get much in.

As you pull the tip out, press his buttocks together to try to

hold the water in a few minutes to do its job of softening the movement. If the water has not come out in 15 or 20 minutes, or if it has come out without much movement, you can repeat the enema. There is no danger from an enema's staying in.

With an older child who will co-operate, you can use a syringe or enema bag or enema can with a rubber tube and a small, hard rubber tip. Don't hang the bag higher than 1 to 2 feet above the level of the rectum (the height determines the pressure). The lowest height that will make the water run in slowly will cause the least discomfort and bring the best results.

382. **Handling an invalid.** When a child is really sick, you give him lots of special care and consideration, not only for practical medical reasons but also because you feel sorry for him. You don't mind preparing drinks and foods for him at frequent intervals or even putting aside a drink he refuses and making another kind right away. You are glad to get him new playthings to keep him happy and quiet. You ask him often how he feels, in a solicitous manner.

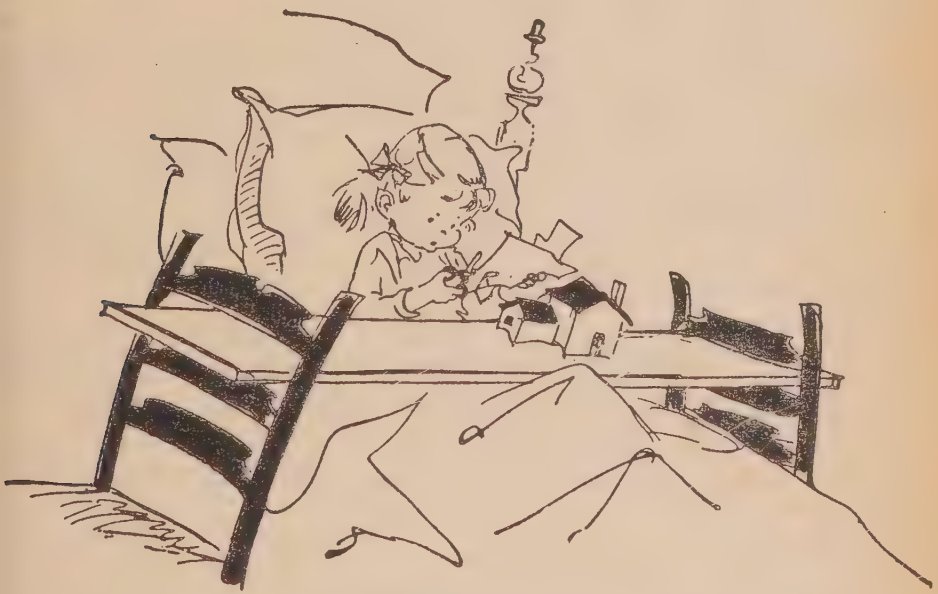
A child quickly adjusts to this new position in the household. If he has a disease that makes him cranky, he may be calling and bossing his mother like an old tyrant.

Fortunately, at least 90 percent of children's illnesses are on the way to recovery within a few days. As soon as the mother stops worrying, she stops kowtowing to the child when he is unreasonable. After a couple of days of minor clashes, everyone is back to normal.

But if a child develops a long illness or one that threatens to come back, and if the parents have a tendency to be worriers, the continued atmosphere of overconcern may have a bad effect on his spirit. He absorbs some of the anxiousness of those around him. He's apt to be demanding. If he's too polite for that, he may just become excitable and temperamental like a spoiled actor. It's easy for him to learn to enjoy being sick and receiving pity. Some of his ability to make his own way agreeably may grow weaker, like a muscle that isn't being used.

So it's wise for parents to encourage themselves to get back into normal balance with the sick child as soon as possible. This means such little things as having a friendly matter-of-fact expression when entering his room rather than a worried one;

asking him how he feels today in a tone of voice that expects good news rather than bad (and perhaps only asking him once a day). When you find out by experience what he feels like drinking and eating, serve it up casually. Don't ask him timidly if he likes it, or act as if he were wonderful to take a little. Keep strictly away from urging unless the doctor feels that it is necessary. A sick child's appetite is more quickly ruined by pushing and forcing than a well child's.



Help an invalid to remain independent and outgoing.

When he's leaping around in bed, it's better to tell him to lie still so that he can get well soon, rather than warn him of how much worse the disease might become. Better still to go light on the talk, except for a firm reminder, and put the effort into getting him busy with something else.

If you are buying new playthings, look particularly for the ones that make him do all the work and give him a chance to use his imagination (blocks, sets for building, sewing, weaving, bead-stringing, painting, modeling, stamp collecting). These make demands on him and occupy him for long periods, whereas the toys that are merely beautiful possessions quickly

pall and only whet his appetite for more presents. Deal out one new plaything at a time. There are lots of homemade occupations like cutting pictures out of old magazines, making a scrapbook, sewing, whittling, building a farm or town or doll's house of cardboard and glue.

If a child is going to be laid up for a long time, but is well enough, get a visiting teacher or a tutor or the best teacher in the family to start him on his schoolwork again for a regular period each day, just as soon as possible.

If he's human, he'll want company part of the time, and you can join in some of his occupations or read to him. But if he wants more and more attention, try to avoid arguments and bargaining. Have regular times when he can count on your being with him and others when he knows you are going to be busy elsewhere. If he has a disease which isn't catching and the doctor will let him have company, invite other children in regularly to play and for meals.

It all adds up to letting the child lead just as normal a life as is possible under the circumstances, expecting from him reasonable behavior toward the rest of the family, and avoiding worried talk, looks, and thoughts.

383. **Going to the hospital.** There's no perfect way to handle the business of taking a child to a hospital. There's usually some disease or risk that worries the parents. The small child is apt to be upset at least mildly by being removed from home, and the older child is worried about being hurt. It won't do for the parents to promise that the hospital will be a bed of roses, because, if unpleasant things happen, the child will lose confidence in them. On the other hand, if he is told *everything* bad that might happen, he is apt to suffer more in anticipation than he will when he is there.

The most important thing is for the parents to show all the calm, matter-of-fact confidence they are capable of, without forcing it so much that it sounds false. Unless the child has been a hospital patient before, he will be trying anxiously to imagine what it will be like, and perhaps fearing the worst. The parents can set his mind at rest better by describing hospital life in general than by arguing with him whether it's going to hurt a lot or a little. You can tell him how the nurse will wake him in

the morning and give him a bath right in bed, how the meals will come on trays and be eaten in his own bed, how there will be time to play, how he may use the bed pan or urinal instead of the bathroom, how he can call the nurse if he needs someone. You can tell him about visiting days, and about all the other children to keep him company in the ward.

If he's going to be in a private room, you can plan together what favorite toys and books he's going to bring, and see whether there is a small radio to take from home or to borrow from a friend. He'll be interested in the electric button for calling the nurse. It's fair to dwell on these everyday, pleasanter aspects of hospital life, because even at the worst the child will be spending most of his time amusing himself.

However, I wouldn't keep away from the medical program altogether, but only let the child see that it's a small part of hospital life.

If he is going to have his tonsils out, you could tell him about the mask they will put up to his nose, and how he will breathe and breathe until he goes to sleep; how he will wake up in an hour and find that his throat is sore (the way it was last winter when he had tonsillitis); that you will be there when he wakes up (if that is true), or that you will come to get him the next day.

If you know days or weeks ahead of time that a child will be hospitalized, it brings up the question of when to tell him. If there is no chance of his finding out by himself, I think it is kinder to wait to tell a small child until a few days before it's time to leave. It won't do him any good to worry for weeks. It may be fairer to tell a 7-year-old some weeks ahead, if he's the kind who can face things reasonably, and especially if he has some suspicions. Certainly don't lie to a child of any age if he asks questions, and never lure a child to a hospital pretending it's something else.

If your child is going to have an operation and you have a choice in the arrangements, you can discuss the matter of anesthetists and anesthesia with the doctor. How a child accepts the anesthesia is apt to make the biggest difference in whether he is emotionally upset by an operation or whether he goes through it with flying colors. Often in a hospital there is one or another

anesthetist who is particularly good at inspiring confidence in children and getting them under without fright. It is worth a great deal to secure the services of such an anesthetist if you have a choice. In some cases there will be a choice also in the kind of anesthetic that the doctor is considering, and this also will make a difference to the child psychologically. Generally speaking, it is less frightening to the patient to start with gas than to start with ether, which is uncomfortable to breathe. The type of anesthetic that is given by a small enema (into the rectum)—even before the child starts for the operating room—is least likely of all to frighten him, but it is not suitable medically in all cases. Naturally, the doctor is the one who knows the factors and has to make the final decision. It's when he feels that there is an equal choice medically that the psychological factor should be considered carefully.

Visiting time in the hospital brings up special problems in the small child. The sight of the parents reminds him how much he has missed them. He may cry heartbreakingly when they leave again or even cry through the entire visiting period. The parents are apt to get the impression that he is miserable there all the time. Actually, young children adjust surprisingly well to hospital life when the parents are out of sight, even though they are feeling sick or having uncomfortable treatments. I don't mean that the parents should stay away—that would be unnatural. The child is probably getting security of a kind from the visits, even though they upset him, too. The best the parents can do is to act as cheerful and unworried as possible. If the parents have an anguished expression, it makes the child more anxious.

If your child is in a private room, where you can visit for long hours, but is upset while you are there, ask the nurse's or doctor's advice about the length of your visits. Many times the small child in a private room eats poorly, fights off treatments, fusses anxiously all the time a parent is in the room, but is quite co-operative at other times. It's the sight of his parents, whose sympathies he knows he can count on, that makes him, by comparison, hate the sight of the hospital people. Such a child is able to have better medical treatment and is happier for more of the day with short visits, hard as this is for parents to believe or act on.

The chance that a child will be emotionally upset by an operation is greatest in the first 5 years of life, and particularly in the period between 1 and 3. This is a reason for postponing an operation in a case where the doctor feels that there is no particular hurry, especially if the child is already dependent or worrisome or subject to nightmares.

384. **Diet for a cold without fever.** Your doctor will tell you what diet to use in each of your child's illnesses, taking into account the nature of the disease and the child's taste. What follows are some general principles to guide you in emergencies when you are unable to get medical help. Diet during diarrhoea is discussed in Section 109.

The diet during a mild cold without fever can be entirely normal. However, a child may lose some of his appetite even with a mild cold, because he's indoors, because he's not taking his usual amount of exercise, because he's a little uncomfortable, and because he's swallowing mucus. Don't urge him to take more than he wants. If he is eating less than usual, offer him extra fluids between meals. There is no harm letting a child drink all that he feels like drinking. People sometimes have the idea that the more fluid, the better the treatment. Excessive amounts of fluid don't do any more good than reasonable amounts.

385. **Diet during fever** (emergency advice until you can consult the doctor). When a child has fever above 102 degrees with a cold, grippe, sore throat, or one of the contagious diseases, he usually loses most of his appetite in the beginning, especially for solids. In the first day or two of such a fever, don't offer him solid food at all, but offer fluids every half-hour or hour when he's awake. Orange juice, pineapple juice, and water are most popular. Don't forget water. It has no nourishment in it, but that's unimportant for the time being. It's for this very reason that it often appeals to the sick child most. Other fluids will depend on the child's taste and his illness. Some children love grapefruit juice, prune juice, lemonade, pear juice, grape juice, weak tea with sugar. Older children like carbonated drinks like ginger ale and sarsaparilla. Tomato juice is well handled in some illnesses, but not in all. Clear broth is digestible, but few children like it.

Milk is hard to make a rule about. The sick baby will usually take more milk than anything else. If he takes it without vomiting, it is the right thing. The older child may reject or vomit it. Offer it if it is desired and held down. With fever of over 102 degrees, milk is easier digested when it is skimmed (the top cream poured off). It's the butter fat that is hardest to digest.

When a fever continues, a child is apt to have a little more appetite after the first day or two. If your child is hungry in spite of a high fever, he may be able to take simple soft solids like toast, crackers, cereal, custard, gelatin, junket, ice cream, applesauce, soft-boiled egg.

The foods that are usually not wanted and not well digested during fever are vegetables (cooked or raw), meats, poultry, fish, fats (such as butter, margarine, cream). However, Dr. Clara Davis in her experiments on diet found that children often crave meats and vegetables during *convalescence*—after the fever is gone—and digest them well.

One rule more important than any other is not to urge a sick child to eat anything that he doesn't want, unless the doctor has a special reason for urging it. It's only too likely to be vomited, or to cause an intestinal upset, or to start a feeding problem.

386. **Diet when there is vomiting** (emergency advice until you can consult the doctor). Of course, vomiting occurs in many different diseases, especially at the beginning when there is fever. The diet depends on many factors and should be prescribed by the doctor. However, if you cannot reach the doctor immediately, you can follow these suggestions. Vomiting occurs because the stomach is upset by the disease and is not able to handle the food.

It's a good idea to give the stomach a complete rest for at least a couple of hours after vomiting. Then, *if the child wants it*, give him a sip of water, not more than half an ounce at first. If this stays down and he begs for more, let him have a little more, say 1 ounce in 15 or 20 minutes. Increase gradually up to 4 ounces (half a glass), if he craves it. If he has gone this far all right, you could try a little orange juice or pineapple juice or a carbonated drink. It is better not to go beyond 4 ounces at a time the first day. If several hours have gone by since the

vomiting, and the child is begging for solid food, give something simple like a cracker, or a tablespoonful of cereal or applesauce. If he is asking for milk, skim it.

If he vomits again, be more strict. Give nothing at all for 2 hours, and then start with a teaspoonful of water or cracked ice. In 20 minutes let him have 2 teaspoonfuls. Work up cautiously again. *If a child who has previously vomited doesn't want anything to drink, even several hours later, don't offer anything.* It would almost certainly be vomited. The reason you play safe is that every time he vomits he is apt to lose more than he has drunk.

The vomiting that goes with a feverish illness is most apt to occur on the first day and may not continue even if the fever goes on.

Small specks or streaks of blood sometimes show in the vomited material when a child is retching violently. This is not serious in itself.

387. **Avoiding feeding problems at the end of illness.** If a child has a fever for several days and wants little to eat, he naturally loses weight rapidly. This worries a mother the first time or two that it happens. When the fever is finally gone and the doctor says it's all right to begin working back to a regular diet, she is impatient to feed him up again. But it often happens that the child turns away from the foods which are first offered. If the mother urges, meal after meal and day after day, his appetite may never pick up at all.

Such a child has not forgotten how to eat or become too weak to eat. At the time his temperature went back to normal there was still enough infection in his body to affect his stomach and intestines. Just as soon as he saw those first foods, his digestive system warned him that it was not ready for them yet.

When food is pushed or forced onto a child who already feels nauseated because of illness, his disgust is built up more easily and rapidly than if he had a normal appetite to start with. He can acquire a long-lasting feeding problem in a few days' time.

Just as soon as the stomach and intestines have recovered from the effects of most illnesses, and are in condition to digest food again, a child's hunger will come back with a bang—and

not just to what it used to be. He usually is ravenous for a week or two in order to make up for lost time. You sometimes see such a child whimpering for more, 2 hours after a large meal. By the age of 3 he may demand the specific foods that his starved system craves most.

The parent's cue at the end of illness is to offer the child only the drinks and solids he wants, without any urging, and to wait patiently, but confidently, for signals that he is ready for more. If his appetite has not recovered in a week, the doctor should be consulted again.

COLDS

388. The cold virus, and the germs that make complications. Your child will probably be sick with colds ten times as much as with all his other illnesses combined. We only partly understand colds at the present time. A cold is started by a "filtrable virus." That means a germ that is so small that it can pass ("filter") through unglazed porcelain, so small that it cannot be seen through a powerful microscope. It is believed that the virus can cause only a mild cold with a clear nasal discharge and perhaps a slight scratchy feeling in the throat. If nothing else happens, the virus cold goes away in about 3 days. But something else often does happen. The cold virus lowers the resistance of the nose and throat, so that other germs that cause more trouble get going, germs such as the streptococcus, the pneumococcus, and the influenza bacillus. They are called the "secondary invaders." These regular bacteria are often living in healthy people's throats during the winter and spring months, but do no harm because they are held at bay by the body's resistance. It's only after the cold virus has lowered the resistance that these other germs get their chance to multiply and spread, causing bronchitis, pneumonia, ear infections, and sinusitis. That's why it is a good idea to take care of a child who has just a cold.

Chilling helps to bring on a cold, but the filtrable virus has to be there in the nose and throat. So the best thing that you can do to avoid a cold is to keep away from anyone who has one.

389. Resistance to colds. It is believed that a person is more susceptible to colds when he is tired or becomes chilled. He is

less apt to be chilled if he has built up his resistance by regularly going out in cold weather. A bank clerk is more easily chilled when he gets outdoors than a lumberjack. That is why children of all ages should be outdoors several hours a day in winter and sleep in cold rooms. It's also the reason they shouldn't be overdressed outdoors or too heavily covered in bed.

Houses and apartments that are kept too hot and dry during the winter season parch the nose and throat and probably lower resistance against germs. The air in a room that's 75 degrees will be excessively dry. Many people hopefully try to moisten the air by putting pans of water on the radiators, but this method is almost completely worthless. The right way to keep enough moisture in the air in winter is to keep the temperature of the room down to 70 degrees or below (68 degrees is a good figure to aim at); then you won't need to worry about the humidity. Buy a reliable indoor thermometer. (See if it corresponds with several of the best thermometers your dealer has —an inexpensive one may be 4 degrees off, which makes it useless.) Then train yourself to glance at the thermometer several times a day. Turn the heat off every time the temperature goes above 68 degrees. It will seem like a chore at first, but after living for a few weeks in a temperature below 70 degrees, you will be trained to it and will feel uncomfortable in a hotter room.

What is the effect of diet on resistance to colds? Naturally, every child should be offered a well-balanced diet. But there is no proof that a child who is already receiving a reasonable variety will have fewer colds if he gets a little more of one kind of food or less of another.

What about vitamins? You see advertisements of medicines and food preparation that contain vitamin A, "the anti-infective vitamin that prevents colds." It is true that a person who is receiving a shockingly small amount of vitamin A in his diet may be more liable to colds and other infections. But this danger doesn't apply to children who are taking a decent diet, because vitamin A is plentiful in milk, butter, eggs, vegetables.

It is believed that a child who is suffering from rickets (because of too little vitamin D) is more susceptible to the complications of colds such as bronchitis. But if a child has no

rickets and is receiving a satisfactory dose of fish-liver oil, there is no reason to believe that he will have fewer colds if *more* vitamin D is stuffed into him. There is no known connection between vitamin C, or the B complex vitamins, and resistance to colds.

390. **Age is a factor in colds.** Children between 2 and 6 get more colds, have them longer, and with more complications. After the age of 6 years the frequency and the severity grow less. A 9-year-old is apt to be laid up only half as much as he was at 6, and the 12-year-old only half as much as at 9 years. This should comfort the parents of a small child who seems to be forever sick.

391. **The psychological factor in colds.** You may be skeptical when I say that there is probably a psychological element in colds. But psychiatrists feel quite sure that *certain* children and grownups are much more susceptible when they are tense or unhappy. I think of a boy 6 years old who was nervous about school because he couldn't keep up to the class in reading. Every Monday morning for several months he had a cough. You may say he was putting it on. It wasn't as simple as that. It wasn't a dry, forced cough. It was a real, thick one. The cough would improve as the week went by and by Friday it would be all gone, only to reappear again Sunday night or Monday morning. There's nothing mysterious about this. We know that one person has cold, clammy hands when he is nervous; an athlete may have diarrhoea before a race. So it's perfectly possible that nervousness may interfere with the circulation of the nose or throat so that germs have a better chance to flourish there.

392. **Exposure to other children.** There is another factor that will probably influence the number of colds a child has. That's the number of children he plays with, especially indoors. The *average* single child living on an isolated farm will have few colds, because he is exposed to few cold germs. On the other hand, the *average* child in a large city nursery will have plenty, even though the nursery is careful to exclude every child who has symptoms. A person can probably give his infection to others for at least a day before he shows the signs of it himself, and at times he can carry cold germs and pass them on to

others without ever showing symptoms himself. There are some lucky children who never catch cold, no matter how many colds there are around them.

Well, you may say, "All of this isn't very helpful in my child's case. He eats a varied diet, takes his cod-liver oil. He's outdoors 3 hours a day. The house temperature is kept below 70 degrees and he sleeps in a cold room. He's not tense at all; in fact, he's a very happy child. And *still* he gets five or six colds each year and they last 2 weeks." The answer is that nobody knows why this child has more colds than another. All one can tell this mother is to try to take his colds philosophically and to look forward to the day when he will have fewer and milder ones.

393. **When the mother has a cold or other infection.** From the first minute that you feel the symptoms of a cold or other disease coming on, have as little close contact as possible with a baby or child. If you are lucky enough to have someone else in the household who can take over the complete care of the baby, have her do it. Have her make the formula, too. But if you have to do it all yourself, keep your face away from the baby. Try not to breathe in his direction. Wash your hands with soap before doing anything for him, especially after using your handkerchief. Be extra careful to keep your fingers off the part of the nipple that will go in his mouth. Don't breathe or cough or sneeze in the direction of his formula or bottles or other food. A child should not stay or sleep in the room with a person who has a cold, if possible.

Should you wear a mask? A mask of cloth or other fabric may prevent some of your cold germs from getting to the baby, *if* you use it right. We don't know for sure how much good it does. Don't bother if it scares your baby. It should have tapes at the four corners to tie behind the head and the neck. You should handle the mask only by the tapes. Boil it after a day's use. Lots of people use masks improperly. They take hold of it where it lies over the nose and mouth to get it in a more comfortable position, or even to hold it in place when they approach the baby. This is worse than not using any mask at all. That part of the mask is filled with germs and contaminates the hand thoroughly. Use your mask when you prepare the baby's bottles and food.

If you take all these precautions, you may be able to keep a baby from catching some of the colds and sore throats that pass through a household. If an outsider has any suspicion of a cold or any other illness, be very firm about not letting him in the same room with the baby, or within a couple of yards of the carriage outdoors. Say that the doctor told you to keep people with colds away. Naturally, if other members of your own household have colds or other infections, they shouldn't be let in the same room with a baby. What about chronic nose colds or sinusitis? If a person has had such an infection for 2 weeks or more, it's probably no longer important to keep him out of the same room. I would still suggest the other precautions: hand-washing, keeping his face turned away when doing anything for the baby.

Anyone in a household who has a chronic cough should be examined by a doctor and X-rayed to be sure it is not tuberculosis. This rule is particularly important if there is a baby or small child in the home, or if one is expected. If you are hiring a maid or nurse, she should be examined and have a chest X ray before becoming a member of the household where there is a baby or child.

394. **Colds in the infant.** If your baby has a cold during his first year, the chances are that it will be mild. He may sneeze in the beginning, his nose will be runny or bubbly or stuffy. He may cough a little. He is not likely to have any fever. When his nose is bubbly, you will wish you could blow it for him. But it doesn't seem to bother him. If his nose is stuffy, it may make him frantic. He keeps trying to close his mouth and is angry when he can't breathe. The stuffiness may bother him most when he tries to nurse at the breast or bottle, so much so that he refuses altogether at times. Extra moisture in his room (Section 397) will help prevent stuffiness. If it is severe, the doctor may prescribe the shrinking kind of nose drops for use just before nursing. In other respects the baby may not lose much of his appetite. Usually the cold is gone in a week. Sometimes, though, a small baby's cold can last an unbelievably long time, even though it stays mild.

Of course, a baby's cold *can* become severe. He can have bronchitis and fever and other complications, but these are less

common during the first year than later. On loss of appetite after illness see Section 387.

395. **Colds and fever after infancy.** Some children go on having the same mild colds, without fever or complications, that they had during infancy. It's more common, though, when a child gets to be 1 or 2 years old, for his colds and throat infections to act differently. Here is a common story. A child of 2 is well during the morning. At lunchtime he seems a little tired and has less appetite than usual. When he wakes up from his nap he is cranky and his mother notices that he is hot. She takes his temperature and it's 102 degrees. By the time the doctor comes, the temperature is 104 degrees. The child's cheeks are flushed and his eyes are dull, but otherwise he doesn't seem particularly sick. He may want no supper at all, or he may want a fair amount. He has no cold symptoms and the doctor doesn't find anything definite except that his throat is perhaps a little red. The next day he has very little fever, but now his nose is beginning to run. Perhaps he coughs occasionally. From this point on, it's just a regular mild cold that lasts anywhere from 2 days to 2 weeks.

There are several variations of this typical story. Sometimes the child vomits at the time his fever is shooting up. This is particularly apt to happen if his mother has unwisely tried to get him to eat more of his lunch than he wanted. (Always take a child's word for it when he loses his appetite.) Sometimes the fever lasts a couple of days in the beginning, before the cold symptoms appear. One reason that the nose doesn't run at first is that fever itself dries it up. Sometimes the fever lasts for a day or two and then goes away without any running nose or cough taking its place. In this case, the doctor may call it grippe or "flu." These terms are commonly used for infections that have no *local* symptoms (like running nose or diarrhoea), but only *generalized* symptoms (such as fever or a sick-all-over feeling). You suspect that this kind of one-day fever is sometimes a cold that was stopped in its tracks: the child will seem perfectly well for a day or two after his fever is gone, and then promptly start a running nose or cough when he is taken out in cold weather.

I am making the point that children over the age of one

year often start their colds with sudden high fever, so that you won't be too alarmed if this happens. You should, of course, always consult the doctor whenever your child falls ill with a fever, because it occasionally means a more serious infection.

When a child is 5 or 6, he's more apt to be starting his colds without much fever again.

Fever that begins after a cold is well under way has a different meaning entirely from the fever that comes on the first day. It usually indicates that the cold has spread or become worse. This isn't necessarily serious or alarming. It only means that the doctor should see the child again to make sure that the ears, bronchial tubes, and urinary system are still healthy.

THE HANDLING OF A CHILD WITH A COLD

396. Keep him evenly warm. You should call the doctor when your child's first cold appears. He will decide whether he needs to make a visit, and outline the treatment. You may not need to call him every time another mild cold begins, but you certainly should call him every time an unusual symptom appears, every time there is fever of 101 degrees or more, and every time the cold is more than just a mild one.

Chilling often makes a cold worse. That is why it is generally recommended that a child stay indoors and away from drafts until the cold is over. It's not quite as important in warm weather, but it is still advisable, especially for the young child. Wind cools one part of the body more than another, and it's this uneven coolness that seems to make the cold worse.

A mother is usually anxious to get her child outdoors again, and a doctor hears the following story many times each winter. The mother says, "His cold was so much better, and it was such a beautiful day, that I decided it would do him good to be outdoors. But tonight his cough is much worse, and he is complaining of an earache." There is no proof that sunshine does a cold any good, and there's plenty of evidence that slight chilling does harm.

There are lots of children who are never kept in when they have a cold, and nothing serious seems to happen. But this doesn't cover all the cases. A doctor sees the ones that become worse. Perhaps that makes him overcautious. It is safer to keep

a young, susceptible child indoors for one or two full days after the last signs of cold are gone, then let him out for 20 or 30 minutes in a sheltered spot. If the cold doesn't come back after the first day out, let him out for his usual length of time the second day. You don't have to be as fussy with an older child.

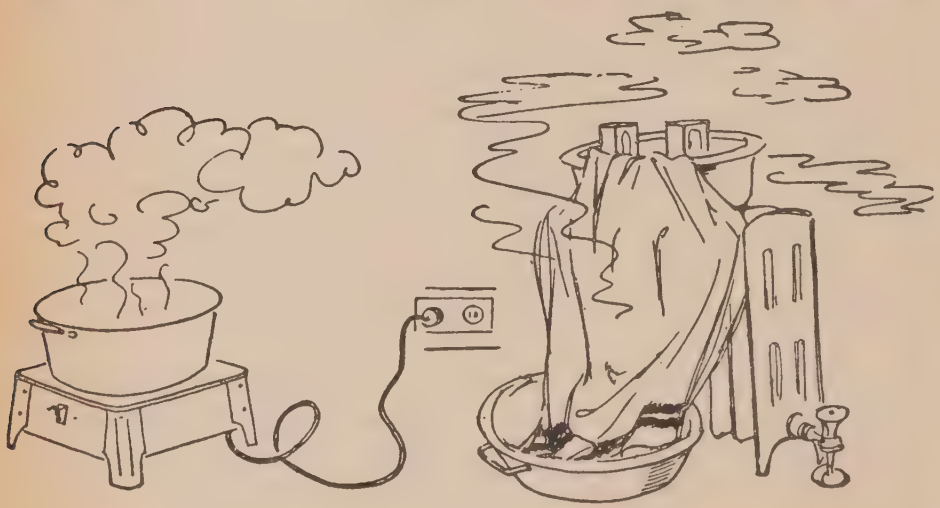
Whether a child has to stay in bed depends on whether he has fever, how old he is, and how much trouble he has, so your own doctor is the one to answer this. Generally speaking, it isn't necessary for him to be in bed unless he is running a fever. But it's a little wiser to keep a *small* child in bed at first. If by the end of 2 days the cold is still mild and without fever, it is usually safe to let him up. However, some small children raise the devil if they are kept in bed, crying and raging for hours. Others who are always jumping around outside the covers can be kept warmer when they are up and dressed. In either of these cases, it may be better to let the child stay up from the beginning *if* he has no fever. A child of 5 or more who has only mild colds certainly doesn't need to be kept in bed if he has no fever.

Clothing during a cold is important. Aim to keep your child evenly, comfortably warm. If he is sitting up in bed, he should wear a light sweater or warm bathrobe over his pajamas to keep the upper half of his body as warm as the lower. Don't put too many blankets over his legs. In a warm room one is sufficient. You don't want him to be in a warm perspiration below and a cool perspiration above. The same principle of even warmth applies if he is up and around the house. He should have as much on his legs as on his chest. (The air is coolest and draftiest near the floor.) The best way to do this is with long overalls. A pair of long stockings or long underwear will also do the job.

The temperature of the room in which the child plays might be kept around 72 to 74 degrees (compared with the 68 degrees which is ideal when he is healthy). It's better to keep the room comfortably warm during the night, too. This means keeping the windows closed. Then there will be no danger of drafts, or of chilling if he gets uncovered. Cold air is health-giving when a person is well, but when he has a cold, it is somewhat risky. If you're worried about the stuffiness of the room, leave the door open into the hall, or give the room an airing by opening the window for a couple of minutes.

397. **Keeping the air moist in an overheated room.** The doctor sometimes recommends humidifying or steaming the room during a cold. It counteracts the dryness of the air and soothes the inflamed nose and throat. It is particularly valuable in the treatment of a tight, dry cough or "croup." It is not necessary in warm weather when the heat is off.

There are several ways to get extra moisture into a room. The easiest is to boil water in an open pan on a small electric stove (often called a "hot plate"), which can be purchased for a dollar or two. The bottom of the pan should be large enough to cover the entire coil, and the pan should be large enough to contain at least a quart of water. This arrangement can be kept boiling all day, and it will evaporate at least a pint an hour. A teaspoonful of tincture of benzoin may be added at each re-



filling for its soothing effect, but the steam is the important thing. Precaution: Be sure to have the boiling water in a place where a small child cannot get into it or pull it over on himself. It's unsafe to use this arrangement if a child can climb out of his crib unless you are going to be constantly in his room, or unless he is old enough to be really responsible. An electric burner should never be left on after the family have gone to sleep. Such stoves can catch fire.

Another method for getting extra moisture into the air is keeping the radiator covered by a wet bath towel. It will need

to be wrung out in water every 20 minutes, or you can keep both ends of the towel constantly in water. Put a pan full of water on top of the radiator and a dishpan of water on the floor. The bath towel hangs from one into the other, being spread out to cover as much of the front of the radiator as possible. You will have to anchor the towel in the top pan with two bricks or clothespins.

You can also humidify a room by hanging a wet sheet on a line, but it gets in the way and drips on the floor.

Various kinds of electric "croup kettles" for making steam can be bought at the drugstore. Most of them are not satisfactory for humidifying a whole room, because they do not evaporate a large amount of water. The small glass ones are particularly inefficient. All these croup kettles, with spouts for ejecting a small jet of steam, are really designed so that a person can sit close and breathe the steam, but this method is no good for small children.

398. **Nose drops if the doctor recommends them.** The doctor may prescribe nose drops. Generally speaking, they fall into two groups. There are the mild antiseptics to kill germs. Their usefulness is limited, because they can't kill the germs which are below the surface. They should be used for only a few days at a time and on the advice of a doctor. The other general class of nose drops are the solutions which shrink the tissues in the nose. This opens up more space for breathing, and gives the mucus and pus a better chance to drain. The main handicap is that, after the tissues have been shrunken, a reaction sets in and they expand again. This may leave the nose more stuffy than ever, and may be irritating to the delicate membranes if it's done too often. There are two situations where the shrinking kind of nose drops are most definitely useful. The first is when a baby is so stuffed up that he is frantic. He can't nurse without suffocating, and his sleep is interrupted. The other situation is in the late stages of a bad cold or sinusitis, when the nose is filled with a thick, yellow secretion which does not discharge by itself. In the other ordinary forms of colds, there is less value in the shrinking type of nose drop, and it is better not to use them except when your doctor specifically recommends them. Don't use them oftener than every 4 hours, and don't use them

for more than a week, unless the doctor says to go on. One disadvantage of all nose drops is that many small children fight them. There are only a few conditions in which nose drops do enough good to be worth getting the child all upset.

There are a number of commercial ointments for rubbing on the chest. The idea is to stimulate the skin of the chest to relieve a cough, or to help the nose with the aromatic oils which are wafted upwards. There is no proof of the benefit of this kind of treatment, but if it seems to help, there is no harm in its use.

399. Cough medicines. No cough medicine can cure a cold, in the sense of killing the germs. It can only make the windpipe less ticklish, so that coughing is less frequent, or loosen up the mucus. A person who has an infection in his windpipe or his bronchial tubes *should* cough once in a while to bring up the mucus and pus. The doctor prescribes a cough medicine to keep the cough from being so frequent that it tires the person out or interferes with his sleep. Any child or grownup who has a cough which is that frequent should be under the care of a doctor, and he is the one to prescribe the right cough medicine.

EAR INFECTIONS

400. Mild ear infections are common in young children. Some children have inflammation of the ears with most of their colds, and others never. The ears are much more apt to be infected in the first 3 or 4 years of life. In fact, there is slight ear inflammation in a majority of colds at this age, but most of them never come to anything, and the child has no symptoms.

Usually the ear doesn't become inflamed enough to cause pain until after a cold has been going for several days. The child over 2 tells what is the matter. A baby may keep rubbing his ear, or just cry piercingly for several hours. There may or may not be fever. The doctor is apt to find at this stage that there is only a mild inflammation of the upper part of the eardrum. This is not an abscess. Many ear infections of this degree will get well again in a few days with bed rest in a warm room, whether or not other treatment is used. A few, however, especially those in which there was fever from the beginning, would get worse and develop into abscesses in a few days if treatment were not started. Incidentally, many early mild inflammations

of the ear cause pain and tenderness behind the ear, in the mastoid region, but this does not mean an infection of the mastoid bone and is not a serious sign at this stage. I mention these points so that you will not begin worrying about an abscess or a mastoid infection the first time an earache develops.

With prompt treatment with modern drugs few ear infections get even as far as an abscess, and mastoiditis is rare.

Any time that your child has an earache, you should get in touch with the doctor that same day, particularly if there is any fever. The drugs that are used when necessary work much better in the early stages of ear infections.

Suppose it will be several hours before you can reach the doctor. What can you do to relieve the pain? A hot-water bottle or an electric heat pad will help some. Small children are impatient of them. A few drops of warm oil in the ear is an old traditional remedy, but has little effect. (Don't ever put anything into an ear that is discharging, except what the doctor tells you to.) A half tablet of aspirin for a small child, a full tablet (5 grains) for a child of 6 or more, will probably bring some relief. What will help even more, if you happen to have it on hand, is a dose of a cough medicine containing codeine that the doctor has prescribed for that particular child. (A medicine prescribed for an older child or adult might contain too much of the drug.) Codeine is an efficient pain killer as well as cough remedy. If the earache is severe, you can use all these remedies together.

Once in a while an eardrum breaks very early in an infection and discharges a thin pus. You may find the discharge on the child's pillow in the morning without his ever having complained of pain or fever. Usually, however, the drum breaks only after an abscess has been developing for several days, with fever and pain. In any case, if you find your child's ear discharging, the most that you should do is to tuck a loose plug of sterile absorbent cotton into the opening to collect the pus, wash the pus off the outside of the ear with soap and water, and get in touch with the doctor. If the discharge leaks out anyway and irritates the skin, wash the pus off and protect the skin with petroleum jelly.

It is quite common for a child to become deaf after a few

days of even a moderate ear infection. In practically all cases this deafness will clear up if the infection is promptly and correctly treated.

BRONCHITIS AND PNEUMONIA

401. Bronchitis. There are all degrees of bronchitis, from very mild with no fever, to severe. Bronchitis simply means that a cold has spread down to the bronchial tubes. There is usually plenty of cough. Sometimes you can hear faraway squeaky noises as the child breathes, and feel the vibration of the mucus as you touch his chest.

A very mild bronchitis, without fever, without much cough, without loss of appetite, is only a little more serious than a nose cold. If the child acts sick, or coughs frequently, or has a fever of 101 degrees, the doctor should be reached promptly, because modern drugs are of great benefit in cases that require them.

The young infant who has a frequent cough should be examined whether he has a fever or not, because in the first month or two of life there can be serious infections without fever.

402. Pneumonia. Pneumonia usually comes on after a child has had a cold for several days, but it may start without any previous warning. You suspect it when the temperature climbs up to 103 or 104 degrees, the breathing becomes rapid, and then there is a cough. Vomiting often occurs at the beginning, and there may even be a convulsion in a small child. Modern drugs bring about a prompt cure of the ordinary forms of pneumonia, if treatment is started early. Naturally, you will be calling the doctor any time your child develops a fever of 101 degrees or more, particularly if he has a cough.

There are also unusual types of pneumonia, most of which are probably caused by filtrable viruses. In many of these "atypical" pneumonias, the child is less sick, though the disease may last a long time.

CROUP

403. There are different kinds. Croup is the word that is commonly used for various kinds of laryngitis in children. There

is usually a hoarse, ringing, barking cough (croupy cough) and some tightness in the breathing.

The commonest and mildest type, *spasmodic croup,* comes on suddenly during the evening. The child may have been perfectly healthy during the day, or have had the mildest kind of a cold. Suddenly he wakes up with a violent fit of croupy coughing, is quite hoarse, and is having difficulty breathing. He struggles and heaves to get his breath in. It's quite a scary picture when you see it the first time, but it's not as serious as it looks. You should call the doctor promptly for any kind of croup.

The emergency treatment of croup, until the doctor can be reached, is warm, moist air. Put the child in a warm room. A small room is preferable, because you can steam it up faster. If the water runs hot, take the child into the bathroom and run hot water into the tub (to make steam, not to put the child in). If there is a shower, that will work best of all. If the water is not hot, boil a pan of water on an electric stove or "hot plate." Hold him close to the steam until the whole room gets steamy. If you have no hot water in the pipes and no electric hot plate, take him to the kitchen and hold him close while you boil water on the stove. An umbrella covering both the child's head and the boiling saucepan will keep the moist air around him. See Section 397.

When the child breathes the warm, moist air, the croup usually begins to improve rapidly. Meanwhile, the room where he will go back to bed should be warmed and the air moistened. Keep the window tight shut and pull the curtains, shades, and shutters. An adult should stay awake as long as there are any symptoms of croup, sleep in the same room with the child for 3 nights, and wake herself 2 or 3 hours after the croup is over to make sure that the room is not becoming too cold again.

Spasmodic croup without fever sometimes comes back the next night or two. To avoid this, have the child sleep in a room in which the air has been warmed and moistened for 3 nights. This form of croup is apparently caused by the combination of a cold infection, a child with a sensitive larynx, and cold air.

There is a more severe form of croup which occurs with fever and a real chest cold. The croupy cough and the tight breathing

may come on gradually or suddenly at any time of the day or night. Steaming only partly relieves it. If your child shows signs of this more serious form of croup, he *must* be under the close supervision of a doctor. If a doctor cannot reach you, you should take the child to a hospital. Use a heated car, if possible, with a wet sheet draped like a tent over your head and the child's head. If the car is cold, put a blanket over the sheet.

Diphtheria of the larynx is still another cause of croup. There is a gradually increasing hoarseness, cough, difficulty in breathing, and moderate fever. There is practically no danger of this form of croup developing if a child has received diphtheria inoculations. However, with any form of croup, a child should be seen promptly by a doctor. The urgency is greatest when the hoarseness and labored breathing are persisting for hours.

SINUSITIS, TONSILLITIS, AND SWOLLEN GLANDS

404. Sinusitis. The sinuses are cavities in the bones surrounding the nose. Each sinus cavity connects with the interior of the nose through a small opening. The maxillary sinuses are in the cheekbones. The frontal sinuses are in the forehead, just above the eyebrows. The ethmoid sinuses are up above the inner passages of the nose. The sphenoids are farther back, behind the nasal passages. The maxillary and the ethmoid sinuses are the only ones that are well enough developed in the early years of childhood to be infected then. The frontals and sphenoids develop gradually after the age of 6. When there is a severe or prolonged cold in the nose, the infection may spread from the nose into these various sinus cavities. Sinus infections usually last longer than simple nose colds, because they are more closed in, can't drain so well. A sinus infection may be very mild and show itself only by a chronic discharge of pus from the back of the nose into the throat (called a "post-nasal drip"). This sometimes causes a chronic cough when the child lies down in bed or when he first gets up in the morning. On the other hand, sinusitis may be severe, with high fever and pain. When a doctor suspects sinusitis, he sometimes investigates further by X-ray pictures or by shining a light through the sinuses in a dark room. He uses various treatments, such as nose drops, nose packs, suction, drugs, depending on the case.

Whatever specific method the doctor is using, remember that the general care of the child is important, too. A sinus infection is, after all, only a more advanced and persistent form of a cold. Like a cold it will be helped by keeping a child indoors, in a warm, even-temperatured room with moist air. The child should be evenly clothed, the windows should be kept closed at night. Many cases of sinusitis are caused by neglecting ordinary colds.

405. **Tonsillitis and throat infections.** Real tonsillitis is a definite disease. The child usually has high fever for a number of days and feels sick. Headache and vomiting are common. His tonsils are fiery red and swollen. After a day or two white spots or white patches appear on them. An older child may complain of such a sore throat that he can hardly swallow. Young children may be surprisingly little bothered by the sore throat.

You should have the doctor for a case of tonsillitis. Convalescence is often slow. If the neck glands become swollen, if the child continues to look washed-out or to run a low fever, treat him as an invalid and keep in touch with the doctor.

There are all kinds and degrees of throat infection caused by a variety of germs. The medical term for them is pharyngitis. Many people feel a slight sore throat at the beginning of every cold. Often the doctor, in examining a child with a fever, will find a slightly red throat as the only sign of disease. The child may or may not notice any soreness. Most of these are soon over. The child should stay indoors until the sore throat is all gone. The doctor should be called if there is fever, or if the child looks sick.

406. **Swollen glands.** The lymph glands which are scattered up and down the sides of the neck sometimes become infected and swollen as a result of any disease in the throat, mild or severe. The commonest cause is tonsillitis. It can develop in the middle of the tonsillitis, or a week or two later. If the glands are swollen enough to be visible, or if there is fever of 101 degrees or more, the doctor should certainly be called. Treatment with drugs may be called for in certain cases and is most valuable if begun early.

Slightly enlarged neck glands may last for weeks or even

months after some throat infections. They can come from other causes, too, such as infected teeth, scalp infections, and general diseases like German measles. You should consult your doctor about them. But if he finds the child generally healthy, don't worry about slightly swollen glands.

TONSILS AND ADENOIDS

407. The tonsils and adenoids are meant to be there unless they are causing trouble. Tonsils and adenoids have been blamed for so many things in the last half century that many people think of them as evil villains which will have to be removed eventually, and the sooner the better. This is the wrong way to look at them. They are there presumably for the purpose of helping to overcome infection and build up the body's resistance to germs. The trouble is, particularly in cities, that there are so many infections around that the tonsils sometimes are overwhelmed and become storehouses of the very germs they are meant to destroy. And the adenoids, when overworked, become so large that they block the back of the nose. This obstructs the breathing and keeps infections in the nose from discharging properly.

The tonsils and adenoids are made of what is called lymphoid tissue, and are similar to the glands in the sides of the neck, the armpits, and the groin. Any of these glands, including the tonsils and adenoids, will become swollen when there is infection near by, as they labor to kill germs and build resistance.

408. The tonsils. The tonsils are sometimes so small that they hardly show. When they are very large, they may almost meet in the middle of the throat. In former years it was believed that all tonsils that were enlarged were diseased, and should be removed. Nowadays it is believed that the size alone is relatively unimportant. The real question is how the tonsils work, and whether they are chronically diseased. In any case, the doctor doesn't try to judge their size during or right after a throat infection, because they will probably be swollen at this time. If the tonsils themselves and the surrounding folds of skin are always inflamed, week in and week out, they are under suspicion. Sometimes chronically infected tonsils are the cause of a generally run-down state, or of a chronic fever, or of pro-

longed swollen glands in the neck, or of other disturbances. The doctor is the one to decide whether the tonsils are chronically infected.

Another reason for considering removal of the tonsils is repeated attacks of real tonsillitis. When a child has a couple of such illnesses within a year, it is often taken as a sign that the tonsils have lost their ability to protect the body and have become a liability. The same decision is usually made if the child has an attack of quinsy sore throat (an abscess behind the tonsil).

The tonsils are sometimes removed for other reasons—for instance, because of frequent colds, rheumatism, and chorea—even though they do not appear definitely diseased, but the likelihood of great improvement in these conditions is less. There is no need to remove the tonsils, even when they are large, in a child who is perfectly healthy and has few nose and throat infections. There is no reason to operate because of a feeding problem, or stuttering, or nervousness; in fact, the operation may make the child worse.

409. The adenoids. The adenoids are clusters of lymphoid tissue up behind the soft palate, where the nose passages join the throat. When they become too enlarged they block this passageway from the nose. This causes mouth breathing and snoring. It may prevent the free discharge of mucus and pus from the nose, and thus help to keep bad colds and sinus infections going. Enlarged adenoids may also block the passages leading from the nose to the ears and favor ear infections.

So the adenoids are most often removed because of mouth breathing, chronic nose and sinus infection, repeated or persistent ear abscesses. Removing them does not necessarily make a child breathe through his nose. Some children are mouth-breathers because of habit (they seem to be born that way) and not because of obstruction. And some children's noses are obstructed not by adenoids, but by swollen tissues in the front of the nose (for instance, by hay fever or other forms of allergy). Removing the adenoids does not guarantee that a child will have no more ear infections; it only makes them somewhat less likely.

When the tonsils are removed, the adenoids are practically

always cut out, too, because the latter is much the easiest part of the job. On the other hand, there is often good reason to take out the adenoids alone, if they are causing obstruction, and to leave the tonsils when they look healthy and are causing no trouble.

The adenoids always grow back to some extent, and the body always tries to grow new lumps of lymphoid tissue where the tonsils used to be. This isn't a sign that the operation was done incompletely or that it has to be done again. It only shows that the body means to have lymphoid tissue in that region and tries hard to replace it. If the adenoids grow large enough again to cause serious obstruction, the operation may have to be repeated. The new growth in the tonsil region seldom needs to be removed a second time, because it is rarely the seat of chronic infection or a true tonsillitis.

Doctors generally try to postpone operations on the tonsils and adenoids, if there is any doubt about it, until the child is in the neighborhood of 7 years old. There are several reasons. After 7 there is a tendency for the tonsils and adenoids to become smaller at the same time that the throat structure is growing larger. Another reason is that the adenoid and tonsil tissue grows back more vigorously before the age of 7. A third and important reason is that the young child may be frightened by the operation and remain nervous for a long while afterwards. In general, it is the timid and sensitive children who are more apt to take it hard. However, if there are urgent reasons for performing the operation in the early years, it should be done.

If there is no great rush about the operation, it is better to do it in the late spring, summer, or early fall, when throat infections are less common. The operation is usually postponed several weeks after a fresh cold or sore throat, for fear of stirring up the infection again. It is unwise to perform the operation when there is an epidemic of infantile paralysis in the neighborhood, since it makes a child susceptible to the disease in its most dangerous form.

In Section 383 there are suggestions about handling operations.

ALLERGIES

410. Allergic nose troubles, including hay fever. You probably know someone who has ragweed hay fever. When ragweed pollen gets in the wind in mid-August, his nose begins to be stuffed up and itch and sneeze and run. This means that his nose is *allergic*, or oversensitive, to the pollen, which doesn't bother other people at all. There are also people who have hay fever in spring because they are allergic to certain tree pollens, and others who have it in early summer from certain grasses. If your child develops a running, itching nose that lasts for weeks, at the same time every year, you should take it up with your doctor. From the appearance of the nose in the season, and from skin tests with the suspected pollens, he will be able to tell whether it's a case of hay fever. The treatment consists of frequent injections, carried out over a long period. The doctor can usually give temporary relief with medicine.

But there are other nose allergies, aside from seasonal hay fevers, which may be less dramatic but more troublesome. There are noses which are sensitive to the feathers in pillows, or to dog hair, or to house dust, or to any number of other substances. Such year-round allergies as these may keep a child stuffy or running at the nose, breathing through his mouth, month in and month out. The chronic obstruction may make him more susceptible to sinus infections. If your child is much bothered this way, your doctor, or an allergy specialist whom he recommends, may be able to find the cause by skin tests. The treatment is different in each case and depends on the causes. If it's goose feathers, you change the pillow. If it's dog hair, you may have to give away the dog and substitute some other plaything. If it's something hard to avoid like wool or the ordinary household molds, the doctor may give injections of the offending substances over a long period. He is likely to recommend "stripping the room" to lessen the dust there, especially if the symptoms occur mainly at night or the first thing in the morning. You remove the rugs and curtains for good and give the room a wet-mopping every day. You either buy dustproof coverings for the mattress and pillow, specially made for this

purpose, or he can use a canvas cot with no pillow at all.

411. Asthma. Asthma is another kind of allergy. Instead of the nose's being the sensitive organ, as in hay fever, it is the bronchial tubes. When the irritating substance reaches the bronchial tubes, thick mucus is secreted, and the passageways for the air are so narrowed that breathing becomes difficult, labored, and wheezing. Coughing occurs.

When an older child has chronic asthma, it's apt to be due to substances that float in the air, such as horse dander, dog hair, molds, etc. Allergists call these "inhalants." In a very young child allergy to foods is more likely to be the cause or to play a part.

The child who has chronic asthma should be tested to discover the offending substances, and then treated. If the disease is neglected, the repeated attacks may have a harmful effect on the structure of the lungs and chest. The treatment depends on the cause and is different in each case. Foods that the child is sensitive to are eliminated from the diet. When inhalants are the cause, the treatment is much the same as in year-round allergies of the nose.

Asthma is not simply a matter of allergy to certain substances. A person has an attack at one time and not at another, even though he's in the same place leading the same life. Attacks are more common at night. Season of year, climate, temperature, exercise, state of mind, play a part in different cases. Certain children are apt to have attacks of asthma (or other allergies) at the times they are nervous or upset and may be greatly improved when their troubles are straightened out, perhaps with a psychiatrist's help. In other words, you try to treat the whole child, not just the asthma.

The treatment of the individual attack of asthma depends a lot on how severe it is, and on what the doctor finds is helpful for that case. There are drugs given by mouth or injection for temporary relief when the child is having real difficulty breathing. There are also powders which are burned in the room, the smoke of which is soothing in some cases.

If your child should develop asthma for the first time when you are out of reach of a doctor, don't be alarmed. The condition is rarely as dangerous as it looks. Keep him in bed if the

breathing is very difficult. If it's winter and the house is heated, have the room comfortably warm and get extra moisture into the air (Section 397). If he is coughing much and you have cough medicine that was prescribed for him before, you can give him a dose. Get him occupied in play or reading while you go about your own work, or read to him yourself. If you hover over him anxiously, it will keep him more frightened, and may actually make the asthma worse. If he continues to have spells, you can try stripping his room (Section 410), until you are able to consult a doctor.

It is impossible to predict about asthma. Cases that start early in childhood are more apt to clear up in a few years than those that start later. A certain number go away by the age of puberty. But sometimes hay fever takes its place.

There is a condition sometimes called asthmatic bronchitis which should be mentioned separately. A baby or small child has spells of wheezing, difficult breathing, not at any old time, as in typical chronic asthma, but only when he has a real cold. This tendency is most common in the first 3 years of life. It's discouraging to have a baby who regularly has this much trouble with his colds, but there is a brighter side to the picture. The tendency to asthmatic bronchitis is usually well on its way to disappearing in a couple of years. The doctor should be called, of course. The infection and the cough may need treating as much as the wheezing. If the house is heated, it may help to get extra moisture in the air (Section 397). The injections and medicines to open up the bronchial tubes, that are often helpful in ordinary asthma, have less effect in asthmatic bronchitis.

412. Hives. Hives are considered, at least in some cases, to be due to allergy of the skin. The commonest kind consist of raised welts. They are often pale in the raised part, because the blood has been pressed out by the swelling. They itch, sometimes unbearably. A few individuals get hives repeatedly, or even most of the time. But many people have them once or twice in a lifetime. They are occasionally found to be caused by sensitivity to some food. They also come from serum injections, and at the end of certain infections. In many cases the cause cannot be discovered.

A household remedy for itching hives is a hot bath to which is added either bicarbonate of soda (baking soda), or starch of the kind which dissolves in water. Use a cupful for a small tub, 2 cupfuls for a large one. The doctor can usually relieve the attack of hives with medicine or an injection.

413. **Eczema.** Eczema is a rough, red rash that comes in patches. It is caused by "allergy," like hay fever and asthma. In hay fever the nose is allergic (sensitive) to a pollen, like ragweed. In eczema the skin may be allergic to some food in the diet. When that food gets into the blood and reaches the skin, the skin becomes inflamed. In another case the skin may be allergic to some material like wool, silk, rabbit's hair, or some substance like orrisroot in powder that comes in contact with the skin directly. A baby is more likely to have eczema when he has relatives who have asthma, hay fever, hives, and eczema.

Even when eczema is primarily due to allergy to foods, there are two other factors that may play a secondary part. The first is irritation of the skin from the outside. One baby has his eczema only when his skin is irritated by cold weather, another only in hot weather from the irritation of perspiration, another still only in the diaper region from the irritation of the urine. If a baby has eczema only where wool comes in contact with his skin, it may be that he is really allergic to wool directly, or it may be that he is allergic to some food, and the wool merely acts as a simple irritant.

Another factor in eczema is the baby's fatness and rate of gaining weight. There is much more eczema in fat babies than there is in medium-weight babies. Thin babies rarely get it.

You will, of course, need a doctor to diagnose and treat the condition. The easiest eczema to describe is the kind that comes in patches of rough, red, thick, scaly skin. When eczema is mild or just starting, the color is apt to be a light red or tannish pink, but if it becomes severe, it turns a deeper red, usually itches, and the baby scratches and rubs it. This causes scratch marks and "weeping" (oozing). When the oozing serum dries, it forms crusts. When a patch of eczema is healing, even after the redness has all faded away, you can still feel the roughness and thickness of the skin.

The commonest place for eczema to begin in a young baby is on the cheeks or the forehead. From there it may spread back to the ears and neck. The scaliness looks from a distance as if salt had dried there, especially on the ears. Near a year of age, eczema may start almost anywhere—the shoulders, the diaper region, the arms, the chest. Between 1 and 3, the most typical spots are the creases in the elbows and behind the knees. Severe eczema can be a very trying disease to take care of. The baby is wild with the itching. The mother is wild trying to keep him from scratching. It can last for months.

What a doctor does in studying and treating a case depends on many factors, including the baby's age, the location and character of the rash, his fatness and the rate at which he is gaining, the history of what new foods were introduced before the rash began, and how he responds to different forms of treatment. Some mild cases can be cured by lotions and ointments alone. In the more persistent ones an effort is made to find what food or foods the child is allergic to. In the young infant fresh cow's milk is often found to be the cause. Then a shift to evaporated milk sometimes helps, because any food is less likely to cause allergy when it is thoroughly cooked. Evaporated goat's milk occasionally succeeds when cow's milk fails, and a few babies can be cured only by giving up real milk altogether and shifting to one of the artificial milks made from soybeans with other ingredients. When orange juice is a factor, vitamin C tablets can be substituted, and when a fish-liver oil is a factor, one of the artificial vitamin D preparations can be used.

In eczema in older babies and children who are eating a number of foods, the doctor sometimes experiments carefully by eliminating various ones from the diet. In severe and persistent cases he may do "skin testing" by injecting samples of different foods. Hives develop around the injections of foods to which the child is sensitive. If a baby is gaining very rapidly, it may help to remove some of the sugar or starches from the diet.

When an external irritant seems to be playing a part, that needs attention, too. For instance, if the baby is wearing partly wool shirts and all the eczema is in the shirt area, cotton shirts should be substituted. If the eczema is all in the diaper region,

it is worth while to take all the precautions that are discussed in the section on diaper rashes (see Section 110). If cold, windy weather brings out the eczema , find a sheltered place for outings. Soap and water are sometimes irritating to eczema, in which case the baby can be cleaned with oil on absorbent cotton.

If, for the time being, you are out of reach of a doctor and your young baby develops a severe itching eczema, it will do no harm, and it may help, to shift from a fresh-milk to an evaporated-milk formula. If you are in the same situation with an older baby who, for instance, develops a severe eczema after starting on egg, leave out the egg until you can get advice. It may take 2 weeks or more for the improvement to show. Wheat is another common offender. It is a mistake, though, for a parent to begin eliminating a *number* of foods from the diet, and it should not be done for even one food if it is possible to get a doctor's help. The reason is this: a case of eczema varies from week to week even with the same diet. When you are changing the diet around yourself you are apt to first think that one food is the cause, then another. Every time the eczema becomes worse again, you become more confused. The danger is that you will make the diet so lopsided that the child's nutrition will suffer. If the eczema is not bothering the baby much, don't try any changes in the diet until you can get help.

The thing to remember about eczema is that it's a tendency inside the child, not an infection like impetigo that you can get rid of completely. In many cases you have to be satisfied if you can just keep the rash mild. Most eczemas that start early in infancy will clear up completely, or at least become much milder, in the following year or two.

SKIN DISEASES

414. Distinguishing the common rashes. This section isn't meant to make you a diagnostician. If your child has a rash, you need your doctor's help. Rashes due to the same cause vary so in different individuals that even a skin specialist sometimes has a job diagnosing them. They confuse less expert people very easily. The purpose of this section is only to give you

a few general pointers about the commoner rashes of children to relieve your mind until you can reach your doctor.

Measles. There will have been fever and cold symptoms for 3 or 4 days before the rash begins. It consists of flat, pink spots that begin around the ears and work down. The fever is high when the rash begins.

German measles. Flat, pink spots, often faint, that rapidly spread all over the whole body. Little or no fever. No cold symptoms, but swollen glands on the back of the head and neck.

Chicken pox. Separate raised pimples. Some of these develop tiny, delicate blisters on top, which break within a few hours, leaving a crust. The pimples come out a few at a time, beginning on the body or face or scalp.

Scarlet fever. The child is sick before the rash comes out, usually with headache, fever, vomiting, and sore throat. The rash, which is a red blush, starts in the warm, moist parts of the body, armpits, groins, and back.

Prickly heat. Comes in babies in the beginning of hot weather. Starts around the shoulders and neck. It is made up of many small, pink pimples, some of which develop tiny blisters.

Diaper rash. All in the area that is wet with urine. Pink pimples of various sizes, or patches of rough, red skin.

Eczema. Patches of red, rough skin, which in the beginning come and go. If it is bad, it becomes scaly, itchy, and crusted. Apt to start on cheeks in the very young infant, later in the first year on the trunk. Common spots after a year are behind the knees and in the elbow folds.

Hives. Welts scattered pretty evenly over the entire body. They itch.

Insect bites. There are many different kinds, from big, puffy swellings, the size of a half dollar, down to a simple blood-crusted spot without any swelling. But there are two common characteristics of most bites. There is a tiny hole or tiny bump in the center where the stinger went in. And the bites are located on the exposed parts of the skin, in most cases.

Scabies. Groups of pimples topped with scabs, and a lot of scratch marks from the incessant itching. Located on parts of

the body which are frequently handled: backs of hands, wrists, penis, abdomen. Not on the back. It is contagious, needs treatment.

Ringworm. Circular patches of rough skin, most commonly about nickel size. The outer rim is made up of little bumps. In ringworm of the scalp, there are round patches of scaly skin in which the hair is broken off short. Ringworm is a fungus infection which is contagious, has nothing to do with worms, requires treatment.

Impetigo. Thick, juicy-looking scabs or crusts, partly brown, partly honey-colored. The infection (caused by the same kinds of ordinary pus germs that make pimples and boils) starts with a delicate blister, most often on the face. Other spots develop on the face and on any part of the body that the hands can carry the infection to. You should have the doctor see it promptly for diagnosis and treatment. It spreads easily if neglected. During impetigo, boil the diapers, sheets, underclothing, nighties, towels, and washcloth, every day.

Poison ivy. Clusters of small blisters of various sizes, on reddened, shiny skin. It itches, comes on the exposed parts of the body, in spring and summer.

Head lice. It's easier to find the eggs than the lice. They are tiny, pearly-white, egg-shaped objects, each one firmly cemented to a hair. There may be itching red pimples where the hair meets the neck behind.

415. **Birthmarks.** Most babies have a collection of red, mottled spots on the backs of their necks at the time they are born. They also commonly occur in two other places: between the eyebrows, and on the upper eyelids. These blotches disappear gradually in most cases, and nothing needs to be done for them.

"Port-wine stains" are areas of skin which have a deep red coloring, but are flat and otherwise normal. They are similar to the red spots on the neck and eyelids, mentioned in the first paragraph, but they occur on other parts of the body, are apt to be larger, deeper-colored, and more permanent. Some of them *do* fade, particularly the lighter-colored ones. There is no easy treatment for them.

"Strawberry marks" are fairly common. These are raised and lumpy and are of an intense, deep crimson color. They look

very much like a piece of the outside of a shiny strawberry. They may be small at birth and later increase in size, or they may not appear at all until after birth. They are apt to grow for a while and then stop. As the years go by, many of them shrink back to nothing again. They can be treated if the doctor thinks it necessary, especially if they occur on some part of the body that shows, or is chafed by the clothing.

"Cavernous hemangiomas" are lumpy blue marks caused by a collection of distended veins deep in the skin. Sometimes they can be removed if they are disfiguring.

Moles can be of all sizes, smooth or hairy. They can be removed surgically if they are disfiguring or irritated by the clothing.

MEASLES, GERMAN MEASLES, ROSEOLA

416. Measles. Measles for the first 3 or 4 days has no rash. It looks like a bad cold that is becoming worse. The eyes are red and watery. If you pull the lower lid down, you will see that it is angry red. There is a hard, dry cough that becomes frequent. The fever usually goes higher each day. The rash comes out about the fourth day, when the fever is high, as indefinite pink spots behind the ears. They spread gradually over the face and body, becoming bigger and darker-colored. The day before the rash comes out, "Koplik spots" appear on the inside of the cheeks, next to the lower molar teeth. They are minute white spots surrounded by redness, but are hard to recognize unless you know them.

The fever stays high, the cough frequent (in spite of medicine), and the child feels pretty sick while the rash comes out full, which takes 1 to 2 days. Then everything should improve rapidly.

You suspect a complication if the fever stays high more than 2 days from the time the rash begins, or if the fever goes down for a day or more and then comes back again. The commonest complications are ear abscesses, bronchitis, and pneumonia. You will be sending for a doctor at least once during a case of measles, whether you suspect the disease or not, because of the cough and fever. You must call him back promptly or bring the child to a hospital if the fever stays up or comes back after 2

days of the rash. The complications are dangerous, and, unlike the measles itself, can be successfully treated by modern drugs.

During the feverish part of the disease, the appetite is lost almost completely. The most the child will usually take is fluids, which should be offered frequently. The mouth needs to be gently cleaned three times a day. It used to be thought necessary to keep the room very dark to protect the eyes. But now it is known that there is little danger. All that is necessary is to darken the room somewhat if the light makes the child uncomfortable. The room should be kept comfortably warm to prevent chilling. The child is usually let out of bed 2 days after the fever is gone. It is safe to let him outdoors and to play with other children a week after the rash began, provided all cough and other cold symptoms are completely gone.

The first symptoms of measles begin anywhere from 9 to 16 days after exposure. It is contagious to others from the very beginning of the cold symptoms. No one with a cold or sore throat should come anywhere near a child with measles, since it is cold germs that cause the complications. It is unusual for a person to catch real measles twice.

An attack of measles can be prevented or made milder if serum is given in time. It's a good idea to prevent measles in a child before the age of 3 or 4, because that is the time when complications are more frequent and more severe. It is also wise to prevent in an older child who is run-down or suffering from a cold or sore throat. Get in touch with your doctor immediately to discuss serum while it will still be effective. The protection of the serum lasts only for a couple of weeks. There's no point preventing measles in a healthy older child, because he'll probably catch it again some other time, anyway.

417. German measles. The rash of German measles looks much like the rash of real measles, but the two diseases are entirely separate. In German measles there are no cold symptoms (running nose or cough). There may be a little sore throat. The fever is usually low (under 102 degrees). The person hardly feels sick at all. The rash consists of flat, pink spots which usually cover the body the first day. The second day they are apt to fade and run together, so that the body looks flushed instead of spotty. The most characteristic sign is swollen, tender glands

on the back of the skull, behind the ears, and on the sides of the neck, toward the back. These glands may swell before the rash comes out, and they are apt to last some time after the disease is over.

German measles usually develops from 12 to 21 days after exposure. The child is usually kept in bed while rash and fever exist. You should have a doctor to make the diagnosis, certainly if the child has any fever, because German measles is easily confused with real measles and scarlet fever.

418. **Roseola.** The proper name for this disease is exanthem subitum, but it's easier to call it roseola, short for roseola infantum. It is a less well-known contagious disease. It usually occurs between the ages of 1 and 3, rarely afterwards. The child has a steady high fever for 3 or 4 days without any cold symptoms, and usually without seeming to be very sick. Suddenly the fever falls to normal, and a pinkish flat rash, something like measles, comes out on the body. By this time the child feels well. The rash is gone in a day or two and there are no complications to worry about.

CHICKEN POX, WHOOPING COUGH, MUMPS

419. **Chicken pox.** The first sign of chicken pox is usually a few of the characteristic pimples on the body and face. These pox are raised up like ordinary small pimples, but some of them have tiny, yellow water blisters on top. The base of the pimple and the skin around it is reddened. The delicate blister head breaks within a few hours and dries into a crust. When a doctor is trying to make the diagnosis, he searches among all the crusted pimples to find a fresh one that still has the blister. New pox continue to appear for 3 or 4 days.

An older child or adult may feel sick and have headache the day before the pox appear, but a small child doesn't notice these symptoms. The fever is usually slight at the beginning, but may go higher the next day or two. Some children never feel sick, never have more than 101 degrees. Others feel quite sick and have high fever. The pox usually itch.

You should call a physician to diagnose and treat your child if he has a rash, certainly if he has a fever or feels sick. (Chicken pox, for instance, can be confused with smallpox and other dis-

eases.) The child is usually kept in bed as long as new pox are appearing. The itching can be relieved by placing him in a warm starch or soda bath for 10 minutes two or three times a day. Use a starch that dissolves in water, or bicarbonate of soda (1 cupful for a small tub, 2 for a large one). Do not rub the scabs off. The only common complication is boils which come from infecting the pox by scratching. Wash his hands with soap three times a day.

Chicken pox usually develops between 11 and 19 days after exposure. The usual rule is to let a child out and back to school a week after the disease began, or 2 days after new pox have stopped appearing. The dried scabs are not contagious themselves, and should not be a cause for keeping the child quarantined. However, some schools insist that he stay away until all the scabs have fallen off.

420. **Whooping cough.** There's nothing about whooping cough in the first week to make you suspect that disease. It's just like an ordinary cold with a little running nose and a little dry cough. Toward the end of the week the mother usually thinks that the cold is about over and sends the child back to school. "There was just a little dry cough left." It is during the second week that the first suspicion arises. Now it's noticed that the child is beginning to have long spells of coughing at night. He coughs 8 or 10 times on one breath. One night, after several of these long spells, he'll gag and vomit. Or maybe he'll whoop. The whoop is the crowing noise he makes trying to get his breath back after a spell of coughs. Some cases of whooping cough never are bad enough to reach the whooping stage, and in a few cases there isn't even vomiting. The diagnosis is then based on the character of the cough in the second week (cough, cough, cough, cough, cough, cough, cough, cough—a string of coughs in rapid succession, without a breath in between), and on the fact that there are other cases in the neighborhood.

You should never jump to the conclusion that your child has whooping cough because he develops a bad cough in the first few days of a cold. In fact, a bad cough in the beginning of a cold is against the diagnosis of whooping cough.

Whooping cough lasts for weeks and weeks. In an average case, the whooping stage lasts 4 weeks, in a severe case 2 or 3

months. A doctor thinks of whooping cough whenever a dry cough lasts a month.

When there is a doubtful case and it is important to make the diagnosis, there are two laboratory tests that sometimes help. The first is a "cough plate." The doctor has the child cough into a laboratory plate containing a special gelatin on which whooping cough germs grow easily. If he finds the germs he is sure it is whooping cough. But if he doesn't find the germs it doesn't prove that it isn't whooping cough. This test is most reliable in the first week or two of the disease. The other test is a blood count. In some cases the result is definite, especially in the 3rd and 4th week; in others it is no help.

Whooping cough can be a serious disease, especially in a baby under 2. It's a disease to avoid like the plague if you have a baby in the household. The main danger at this age is exhaustion and pneumonia.

Your doctor will prescribe treatment depending on the age of the child and the severity of the case. Cough medicines are always used but often have only a small influence. Most cases do better when in cold air, day and night, but naturally the child must be protected against chilling. Robust children are sometimes allowed to play outdoors throughout the disease as long as they have no fever. Naturally they should not play with other children. Some children have many fewer coughing spells when they are kept in bed. When vomiting is a problem, frequent small meals stay down better than the regular three full meals. The safest time of all to feed a child is right after he has vomited, since he usually won't have another bad spell for some time. A tight abdominal binder may give relief to the exhausted abdominal muscles.

Since whooping cough is sometimes a serious disease, especially in babies and young children, it is important to call a doctor promptly when there is a suspicion. There are two main reasons: to make sure of the diagnosis, if possible; and to prescribe the right treatment. Special treatment is called for and is valuable in some cases.

Quarantine regulations are different in different communities. Usually a child is kept out of school until 5 weeks after the beginning of the disease and until he has stopped vomiting.

The contagiousness of whooping cough does not cease suddenly after a certain number of weeks. It only gradually diminishes, sooner in a light case. For home purposes you can count a child as being no longer much danger to others when his cough has been much improved for 2 weeks. Whooping cough takes from 5 to 14 days to develop after exposure.

421. **Mumps.** Mumps is principally a disease of the saliva glands, most commonly the parotid glands which lie in the hollow just under the lobe of the ear. First the gland fills in the hollow, then swells the whole side of the face. It pushes the lobe of the ear upwards. If you run your fingers up and down the back part of the jawbone, you can feel that the hard swelling runs forward, covering part of the jawbone.

When a child has a swelling in the side of his neck, the question always comes up, is it mumps (infection of the parotid saliva gland) or is it an ordinary swollen gland (one of the lymph glands in the side of the neck)? The ordinary lymph glands that sometimes swell after a sore throat are lower down on the neck, not tucked up under the ear lobe. The hard swelling does not cross the jawbone.

When a small child develops mumps, the swelling under the ear is usually the first thing noticed. An older child may complain of pain around his ear or in the side of his throat, especially on swallowing or chewing, for a day before the swelling begins. He may feel generally sick. There is often little fever in the beginning, but it may go higher on the second or third days. Most commonly the swelling begins on one side first, but spreads to the other side in a day or two. Sometimes it takes a week or more to spread to the other side, and, of course, in some cases the second side never swells.

There are other saliva glands besides the parotids, and mumps sometimes spreads to these, too. There are the submaxillary glands tucked up under the lower part of the jawbone. The sublinguals are just behind the point of the chin.

A very mild mumps swelling may go away in 3 or 4 days. The average swelling lasts a week to 10 days.

Mumps can spread to the testicles in men and boys who have reached the age of puberty, and this occasionally sterilizes the testicles. Therefore, you should keep a strict quarantine, espe-

cially for fathers. Mumps sometimes causes a special kind of mumps meningitis. The child has high fever, a stiff neck, and is delirious. This is seldom dangerous. Infection of the pancreas gland in the abdomen may cause severe abdominal pain and vomiting.

Mumps is one contagious disease that you can catch a second time, so don't do any unnecessary exposing. The fact that a person has had it on both sides doesn't make any difference; he can still get it again.

You should call the doctor for a suspected case of mumps. It is important to be certain of the diagnosis. If it turns out to be a swollen lymph gland, the treatment is quite different.

The child is usually kept in bed until the swelling is gone. Some people can't take tart-tasting foods like lemon juice during mumps (it hurts the inflamed glands), but others continue to enjoy them. So a lemon or pickle is no test of mumps.

Mumps takes 2 to 3 weeks to develop after exposure.

SCARLET FEVER, DIPHTHERIA, INFANTILE PARALYSIS

422. **Scarlet fever.** Scarlet fever usually begins with some of these symptoms: sore throat, vomiting, fever, headache. The rash is not apt to appear for a day or two. It begins on the warm, moist parts of the body, such as the sides of the chest, the groins, the back where the child has been lying. From a distance it looks like a uniform, red flush, but if you look at it closer, you can see that it is made up of tiny red spots on a flushed skin. It may spread over the whole body and the sides of the face, but the region around the mouth stays pale. The throat is red, sometimes very angry, and after a while the tongue usually gets red, first around the edge. You should, of course, call the doctor if your child has fever and sore throat.

Nowadays scarlet fever is not apt to be as severe as it used to be. It is not an entirely separate disease with a germ of its own, like measles. It is caused by one type of the common streptococcus, which produces so many sore throats, swollen glands, ear abscesses. Scarlet fever is just one form that a streptococcus infection can take, most commonly in early childhood. In the olden days, before it was known to be a form of streptococcus

infection, scarlet fever was dreaded because cases developed far away in time and distance from other cases. Thinking that one case must come from another, people would blame the contagion on a toy that had been played with by another scarlet-fever patient a year before. Now we understand that a child who develops scarlet fever probably picked up a germ from someone who just had a sore throat or was carrying the streptococcus without feeling its effect at all.

Scarlet fever not only tends to be milder these days, but its danger is also lessened by the use of modern drugs and serum. Drugs are particularly valuable for some of the complications. The common complications are ear infections, swollen glands in the neck, and nephritis (which produces blood in the urine). Chilling is suspected of bringing on complications. They may begin any time in the disease, but most commonly 10 to 15 days after the fever has come down, when the child has seemed to be completely recovered. That is why a scarlet fever case is usually kept in bed a full 3 weeks, and longer if he has not recovered completely. He should be examined regularly, and you should keep in close touch with the doctor until the child is really well. Report promptly any new symptoms such as ear pain, swelling of the neck, redness or scantiness of the urine, arthritis, any return of the fever.

Though scarlet fever may spread easily in an institution, it is not very contagious in ordinary day schools. You should not be alarmed if you receive a notice from your child's school that he has been exposed. His chances of catching it are small. When it does develop, it is usually within a week of exposure. Quarantine regulations vary a great deal in different localities.

423. **Diphtheria.** Diphtheria is a serious but completely unnecessary disease. If your child is given 3 injections in infancy and another 3 years later, there's practically no chance of his catching it. It begins with feeling sick, sore throat, and fever. Dirty-white patches develop on the tonsils and may spread to the rest of the throat. Occasionally it begins in the larynx with hoarseness and barking cough; the breathing becomes tight and difficult. In any case, you should have a doctor when your child has sore throat and fever, or when he has any croupy symptoms. The treatment of any case of suspected diphtheria con-

sists in the immediate use of serum. The disease develops within a week of exposure.

424. **Infantile paralysis (anterior poliomyelitis).** In the summer and early fall, when most epidemics of infantile paralysis occur, parents naturally think of this disease whenever a child becomes sick. It begins, like many other infections, with a general sick feeling, fever, and headache. There may be vomiting, constipation, or a little diarrhoea. But even if your child has all these symptoms and pains in his legs in addition, it's a mistake to jump to conclusions. The chances are still great that it's just grippe or a throat infection. Of course you will be getting a doctor anyway. If it's a long time before he comes, you can reassure yourself this way: If the child can put his head between his knees, or bend his neck forward so that his chin touches his chest, he probably hasn't got it. (Even if he can't do these tests, it doesn't prove that he has the disease.)

Parents are troubled when there are cases of infantile paralysis in their part of the country about how strict to be with their children. Your doctor who knows local conditions can advise you best. There's no point being panicky or shutting your children away from all human contact. If there are cases in your community, it would be sensible to keep your child away from crowds, especially in closed places like stores and movies, and away from swimming places that many people use. On the other hand, it's out of proportion, from what we know at present, to keep him from seeing his regular friends. If you were going to be that careful with him the rest of his life, you wouldn't ever let him cross a street. Doctors suspect that chilling and exhaustion make a person more susceptible to the disease, but it's sensible to avoid these at any time.

As yet, there is no known way to prevent the disease, or to stop the infection in a case after it has started. On the other hand, a majority of the children who catch it don't have any paralysis at any time. A fair number of those who are paralyzed for a while recover completely. Most of those who don't recover completely improve considerably.

If there is any paralysis after the acute stage of the infection is over, it is vitally important that the child continue to have regular medical attention from a competent doctor. How a

limb is to be treated so that it will be most efficient in the long run depends on many factors. The doctor has to judge at each stage, and there are no general rules. Many ingenious operations can be performed to increase the usefulness of limbs and to prevent deformities, when some paralysis remains. The National Foundation for Infantile Paralysis stands ready to help families secure medical care for this disease. You can write to the Foundation in any large city.

QUARANTINE

425. Quarantine or isolation for contagious diseases. On general principles it's a good idea to keep a child with a contagious disease away from all other members of the household, except for the one person who is taking care of him. This is first of all to prevent others—either adults or children—who have not had the disease from catching it unnecessarily. If your other children were exposed before you knew what the disease was, they will most likely catch it anyway, but it is probably better for them not to be continually overexposed. Another reason is so that they will not be carrying the germs to others outside the home. To be sure, the risk of a healthy person's carrying the germs to other outsiders is slight in measles, chicken pox, and whooping cough, though it occasionally occurs if less than half an hour elapses. In the case of scarlet fever, it is more important for only one adult to be in the child's room, because the streptococcus that causes it can be carried in the throat for long periods. The fewer people who pick it up from the child, the less chance of its being spread around the community. Another reason for keeping the sick child isolated is so that he will not be picking up new germs from others to complicate his illness.

How do you maintain a good quarantine? You keep the child in one room and keep everyone else out except the one grownup who is taking care of him. She slips on a smock which is kept hanging in the room just for this purpose. This keeps her regular clothes from collecting germs. She takes it off every time she leaves the room. She washes her hands every time she leaves the room. All the drinking and eating utensils that leave the room should be carried to the kitchen in a dishpan and boiled

in it before being handled or washed or mixed with the utensils for the rest of the family.

In the case of scarlet fever, diphtheria, and some other serious diseases, further precautions are required by some health departments. Sheets, pillow cases, night clothes may have to be soaked in antiseptic solution before being washed. The room may have to be stripped of rugs, curtains, bureau covers, etc., at the beginning of the disease. The health department may forbid anybody outside the family from entering the home.

In most places no restrictions are placed on grownups in the family about leaving the home, going to business, in *any* of the diseases, except in the case of schoolteachers and foodhandlers. You have to use your own good sense, though, about visiting families who have susceptible children. The chances of your carrying the germs to other children are practically zero as long as you keep away from them. Just the same, you're not going to be very welcome if the mother is fussy, especially if the disease is a serious one. She'll blame you if her child catches that disease any time in the next year. On the other hand, if you have had the disease and if a friend who doesn't worry, and whose children are out of the way, asks you over for the evening, don't hesitate to go.

Other children in the home who have had the disease in question are practically always allowed to go to school during the quarantine period if it is one of the less serious diseases. The rules about brothers and sisters may be stricter for such diseases as scarlet fever, diphtheria, meningitis, etc. The rules about other children in the family who *haven't* yet had a disease vary in different localities and in different schools. For the sake of other small children and your own conscience, keep your child away from the neighbor's small children at the time when he is due to come down with a disease.

TUBERCULOSIS

426. **Tuberculosis is different in infants, children, and adults.** Most people think of tuberculosis as it occurs typically in adults. A "spot" or cavity develops in the lung which produces such symptoms as fatigue, loss of appetite, loss of weight, fever, cough, sputum.

Tuberculosis in childhood usually takes other forms. In the first 2 years of life, resistance is not as good as it will be in later years, and there is more chance of the infection's spreading to other parts of the body. That is why you never take the slightest chance in exposing a baby to a known case of tuberculosis unless the doctor and the X ray guarantee that he has been completely cured. It's a reason also why anyone in a household who has a chronic cough should be examined and X-rayed, and why it's wise to have a new maid or nurse examined and X-rayed.

In later childhood, tuberculous infection is fairly common and less likely to cause serious trouble. This is not a reason to treat it lightly or take any chances. Tuberculin tests show that in some cities as many as 50 per cent of all children have had some tuberculosis by the time they are 10 years old. Most of these cases have been so mild that no one suspected that anything was wrong at the time. An X ray shows at most a little scar where the infection healed in the lung or in the lymph glands at the roots of the lungs.

Sometimes, however, a childhood type of tuberculosis is active enough to cause symptoms such as fever, poor appetite, poor color, irritability, fatigue, and perhaps a cough. (There isn't much sputum, and what there is, is swallowed of course.) The infection may be in other parts of the body, such as the bones or the neck glands, but most commonly it's in the lungs and in the lymph glands at the roots of the lungs. In most of these active cases, healing gradually takes place over a period of 1 to 2 years if the child is well cared for, and only a scar is left. In a few of them, however, a more serious infection develops.

As the child reaches the age of adolescence, he becomes more liable to develop the serious, adult type of tuberculosis. This should be kept in mind whenever an adolescent or young adult is run-down, tired, loses appetite or weight, whether or not there is any cough.

427. The tuberculin test. A few weeks after tubercle bacilli have gotten into a person's body, he becomes "sensitized" to them. After that if the doctor injects a drop of tuberculin (material from dead tuberculosis germs) into his skin, a red spot will develop. This is a positive tuberculin test. (There is an-

other method called the Patch Test, which looks like a prepared bandage and requires no injection.) The red spot shows that the body has already had experience with tuberculosis germs and reacts against them. If no red spot develops, it shows that the body has not contained the germs before. Generally speaking, if a person has ever had a tuberculous infection, he will react with a positive test the rest of his life, even though the infection was healed long ago.

Doctors often give tuberculin tests in routine examinations, for instance, when a child comes to the office or to a clinic for the first time. The test is also made when a child isn't doing well, or has a chronic cough, or when tuberculosis is discovered in another member of the family.

If your child is ever found to have a positive tuberculin test (which is not impossible when you consider how many children are positive), you have to keep a sense of balance. There's no need to be alarmed, since a great majority of the cases discovered throughout middle childhood have either healed already or will heal gradually with care. On the other hand, you don't want to neglect any precautions.

The first step is the doctor's investigation of the child's case. X ray of the lungs is essential in all cases to see if there are any signs of active infection or of healed scars. Sometimes the doctor orders other tests: X rays of other parts of the body, washing out of the stomach to see if there are tubercle bacilli in sputum the child has swallowed, the taking of temperatures for a period. If the doctor is convinced that the infection is already well healed, he may recommend that the child be allowed to lead an entirely normal life. However, he will want to take further X rays at regular intervals to be sure. He advises also taking precautions to avoid measles and whooping cough for several years if possible, since these diseases sometimes stir up recently healed tuberculosis.

If there is any suspicion of *active* tuberculosis, the doctor may limit the child's activity to a greater or lesser degree, even put him to bed for a prolonged period.

Aside from the child himself, the doctor will check every other member of the household (and any other adult that the child regularly comes in contact with) to discover, if possible,

where his tuberculosis germs came from, and to find out if other children in the household have been infected, too. Other children should all have tuberculin tests. If any of them are positive, they should be examined and have their lungs X-rayed. It doesn't matter how healthy the other members of the household feel or how unnecessary they think all the fuss is. Many times no disease is found in any adult in the household, and it has to be assumed that the child picked up the germs from street dust or some other source outside the home. On the other hand, an active case of tuberculosis is sometimes found in the least-suspected adult in the house. It's a lucky thing for him to have his disease discovered at an early stage, and it's lucky for the rest of the family to have the danger removed. No person with active tuberculosis should stay in the house with children, but should go promptly to a sanitarium, where he has the greatest chance of being cured and the least chance of infecting others.

RHEUMATIC FEVER

428. **It takes many forms.** Rheumatic fever is a disease that affects the joints, the heart, and other parts of the body. We don't know yet for sure what its real cause is. The liability to it runs in certain families. Many doctors believe that it is a reaction in some part of the body (a joint or the heart, for instance) to a streptococcus infection in the throat. Occasionally chilling seems to play a part in starting up the disease.

Sometimes it takes a very acute form with high fever. In other cases it smolders along for weeks with only a little fever. When there is severe arthritis, it travels around from joint to joint, causing them to become swollen, red, and exquisitely tender. In other cases the arthritis may be mild—just an aching off and on in one joint or another. If the heart is being affected severely, the child is visibly prostrated, pale, and breathless. In another case it is discovered that the heart has previously been damaged by some past attack that was so mild it was not noticed at the time.

In other words, rheumatic fever is an exceedingly variable disease. Naturally you would consult your doctor if your child developed any of the symptoms in a severe form. But it's just as

important to have a child examined who has vague symptoms like paleness, tiredness, slight fever, mild joint pains.

429. **Joint and growing pains.** In the olden days, it was thought natural for children to complain of "growing pains" in their legs and arms, and nobody worried about them. Ever since it was discovered that rheumatic fever pains could be very mild, doctors have had to consider this possibility in every case of pains in the limbs. But parents sometimes assume that rheumatic fever is the only cause for all of them, and worry unnecessarily.

There are, for instance, leg pains caused by flat feet and weak ankles, which occur most commonly toward the end of the day when the child is tired. There is the child between the ages of 2 and 5 who wakes up crying, complaining of pain around his knee or his calf. It happens only during the evening, but may recur each night for weeks on end. On investigation it usually proves not to be due to rheumatic fever.

There are many other causes for pains in the arms and legs, and you can see that you will need a doctor to examine, test, and decide in every case.

430. **Heart murmurs.** The words "heart murmur" have an alarming sound to parents. It's important to realize that a great majority of them don't mean anything serious. Generally speaking, there are three kinds, called "acquired," "congenital," and "functional."

Most *acquired* murmurs in childhood come from rheumatic fever, which inflames the valves and leaves scars on them afterwards. This causes them either to "leak," or to obstruct the proper flow of the blood. When a doctor hears a murmur in a child's heart that wasn't there before, it may mean on the one hand that *active* inflammation is going on. In this case, there will be other signs of infection, such as fever, rapid pulse, elevated blood count and sedimentation rate. Then the doctor keeps the child a complete invalid in bed until all signs of inflammation go away—even if it takes months. On the other hand, if there have been no signs of active infection for some time, the murmur may be due to old scars left over from a previous attack.

In former years, the child with an old murmur was often

treated as a semi-invalid for years, forbidden to play active games or sports, even though there were no signs of active infection. A doctor's tendency nowadays is to let the child who is *completely* over the stage of active inflammation go back gradually to as normal a life as possible (including the games and sports that he can do easily), if the healed scars do not noticeably interfere with the efficient working of the heart. There are two reasons for this. The muscles of the heart, as long as they are not inflamed, will be strengthened by ordinary activity. Even more important is keeping the child's spirit healthy—preventing him from feeling sorry for himself, from feeling that he is a hopeless case, that he's different from everyone else.

However, if a child has had one active attack of rheumatic fever, the parents unfortunately can't throw caution to the winds, even though he has made a good recovery. Another attack may occur. This can't be prevented by worrying over the child or unnecessarily keeping him an invalid. But there are ways to be sensible. (1) Have him checked over regularly by his doctor, no matter how well he is. (2) Don't send him to play with a child who is laid up with a sore throat or cold. (It would be carrying this too far to snoop around for signs of colds among the gang he's playing with outdoors.) (3) Keep him from becoming exhausted or chilled, since this may lower his resistance to another attack. Get him out of the lake or ocean by the time he loses his color, before he begins to shiver. If the gang has been tearing round like mad and he's beginning to look tired, invite them in for a treat. If regularly he can't take a full day's activity without becoming tired, it usually is better for his morale to keep him indoors until the middle of the morning and bring him in again at, say, 4:30 P.M., rather than to let him out for all day with constant warnings not to play too hard. Avoid reminding him that he's different or that he will be sick if he doesn't behave. (4) If he catches a cold or a sore throat, keep him indoors from the earliest signs, until he is all well. If at any time he runs a fever, or becomes pale and listless, or complains of joint pains, call the doctor.

Murmurs caused by *congenital heart disease* are generally discovered at birth. Such a murmur means that the heart was improperly formed in the first place. The important thing is

not so much the murmur itself, but whether the malformation interferes with the efficiency of the heart. If it does, the baby may have blue spells, or breathe too hard, or grow too slowly. If a child can exercise without turning blue, without becoming more out of breath than the average, grows at the normal rate, it is important for his emotional development that he not be thought of or treated as any more of an invalid than the doctor considers essential. He does need to avoid unnecessary infections and to be well cared for during illnesses, but so do all children.

The term *"functional murmur"* is just a clumsy way of saying that a child has a murmur which doesn't come from a congenital malformation or from rheumatic fever. These functional murmurs are *very* common in the early years of childhood. They tend to fade out as the child reaches adolescence. Your doctor tells you about a functional murmur in your child so that if it is discovered later in childhood by a new doctor, you will be able to explain that it has been there all along.

431. **Chorea.** Chorea, or St. Vitus' dance, is a nervous disease which is believed to be one of the forms of rheumatic fever. There are twitching and writhing movements of different parts of the body, which may last for months. Twitches of the muscles of the face produce irregular grimacing. A shoulder may shrug, first in one direction and then in another. Twitchings of the trunk muscles make the body lurch slightly. The hands and fingers may twitch or writhe. The child's handwriting may become poor, and he may drop things. The movements come *irregularly,* first in one muscle, then in another. No two movements are exactly the same.

Most attacks of chorea occur between the ages of 7 years and the beginning of adolescence. Other nervous traits, such as *tics* and *general restlessness* are common in this age period, too, and are often confused with chorea. With a tic a child nervously and repeatedly makes exactly the same motion, such as eye-blinking, throat-clearing, shoulder-shrugging (Section 324), whereas the movements of chorea are skipping around, and always different. General restlessness is something else again. By that I mean a child who is constantly squirming in his chair, shuffling his feet around, fiddling with his hands, etc.

During an attack of chorea, a child is apt to be unstable. He cries easily, laughs easily, flies off the handle on slight provocation. You have to make allowances for this in handling him at home, because he can't help it. A child with chorea should be put to bed under a doctor's care. The chorea itself will surely go away in time, even if there are several attacks. But the child must be examined regularly to make sure that there is no fever, no inflammation of the heart or joints.

URINARY DISTURBANCES

432. Late bed-wetting (enuresis). There are a number of different causes. A very few cases are due to physical disease, and in these there are usually symptoms, such as inability to control the urine at any time of day, that make the doctor suspicious.

The commonest cause seems to be tenseness of various sorts in a child's feelings. This apparently keeps his bladder small and irritable, so that it will not hold much urine. (The bladder is really just a hollow muscle.) A 3-year-old who has been dry for 6 months may begin to wet again when he moves to a new house for the summer. Even though he is happy in his new surroundings, he evidently feels homesick enough underneath so that it makes his bladder tense. When the children of London were removed to the country at the beginning of the war, away from family, friends, and familiar surroundings, bed-wetting was common, even in adolescent children. It is frequent in some orphanages. Children are also apt to wet after exciting experiences like a birthday party or the circus. Bed-wetting may start again when a new baby arrives in the home.

Perhaps the child who wets when he is homesick or upset by the arrival of a new baby brother is not just tense, but is also longing in his dreams to go back to the good old days when he was a baby himself, when his mother took care of all his bodily needs without complaint, and he had nothing to worry about.

If different kinds of uneasiness are able to make a child start wetting again, it is easy to see why other children are too high-strung ever to get dry at night in the first place. Take the case of a child one and a half years old whose mother is too determined to make him dry. First, she picks him up at ten o'clock each night, but finds he's usually wet. So she decides to pick

him up at nine o'clock and at midnight. Sometimes she catches him dry, but not often enough. Next, the mother and father arrange to take turns picking him up every 2 hours throughout the night. At first they find him dry fairly regularly, but as time goes on he becomes wetter and wetter. What is happening here, anyway? The child is being made worse instead of better. Certainly he's becoming more tense. Perhaps he is also rebellious even in his sleep. In another case the parents may not be concentrating on a child's bladder training, but on his feeding or discipline. The resulting nervousness keeps the bladder tense.

Psychiatrists who have studied bed-wetting in older children believe it occurs most frequently in certain types. There is the "bottled-up" child who is afraid to let out his vigorous feelings or to play freely wth others. Somewhat similar is the shy child who is unusually ambitious and competitive underneath. Then there is the restless, excitable child, and occasionally the rebellious, spiteful one. Happy, outgoing children seldom continue to wet the bed.

If your child is not beginning to have control by 4 or 5, it is time, not to go after his training with greater vigor, but to ask some questions. Have efforts to make him dry been too severe? Since they have not succeeded, it may be better to take the opposite road. If you stop making bed-wetting an issue, it will not make the child dry right away, or even for a long time, but it will lead to a calmer state of mind. In the long run, this will help him to gain control of the bladder. Is the child being made tense by a feeding problem or by too much nagging? Could his rivalry with a brother or sister be eased? Is he being urged at home or in school to compete and to excel? If you have trouble answering these questions yourself, consult with his teacher, if she is a very understanding person, or a child-guidance clinic, or a children's psychiatrist. Concentrate on making his life agreeable and calm and satisfying—not on the bed-wetting.

Shaming the child generally works in the wrong direction. The small child who hasn't much sense of shame yet is apt to be made more rebellious. The older child feels shame anyway; his parents' shaming only makes him more tense. What about making him wash his own bedclothes? It would probably not be too harmful if done in a good-natured way for a brief trial,

but usually it does not work for the same reasons that shaming does not work. An alarm clock, or an electric apparatus that rings a bell when the bed is wet sometimes helps the older child who is most anxious to do anything possible. You should remember, though, that such methods work by keeping the child more on guard during his sleep, and add to his general nervousness. They are therefore somewhat risky, and should not be used in the child who is generally tense and poorly adjusted. There is less risk with the older child who gets along well at home and in the outside world. An older child, anxious to co-operate, may get good results from stopping his urination twice before he has finished each time he goes to the bathroom for 2 or 3 weeks. The extra control he learns helps him when asleep also. There is more chance of success if the child is allowed to work out his program for keeping dry with an understanding doctor.

What about restricting fluids in the afternoon and evening? The less fluid there is in the body at bedtime, the less chance there is of wetting, whatever its cause. The older child who is anxious to co-operate may be able to limit his drinking from the middle of the afternoon on. In the younger child it may be possible in some cases to *very gradually* and tactfully reduce his milk at supper without making him mad. It's useless to forcibly restrict the child who is demanding more to drink; you will probably make him resentful enough so that he will wet anyway. And in many cases the mother's efforts to withhold the fluid make the child wild to drink more than he ever took before.

A child who is slow to become dry should be examined and have a urinalysis. There are also various elaborate methods for studying the urinary system, which the doctor will recommend if he suspects a physical disease. But if he is satisfied that there is nothing pointing that way, it is much better, from the psychological point of view, to avoid unnecessary tests. When they involve pain, undergoing an anesthetic, being in a hospital, or instrumentation in the genital region, they are bound to upset and worry the child to some degree.

433. Daytime wetting. Late daytime wetting (say after the age of 3) is, once in a great while, due to physical disease. In

such a case, the child usually just dribbles a small amount at frequent intervals. He needs a thorough check-up by the doctor. The urine itself should be examined in *all* cases of late wetting.

In most cases of daytime wetting, there is bed-wetting, too, and much that was said in Section 432 about the importance of various kinds of nervousness could be repeated here.

But there are two additional factors that ought to be mentioned. Most of the children who go on wetting in the daytime are not only a little bit tense or uneasy, they also have a tendency to balk and to procrastinate. Watching such a child, you can see that one half of him knows perfectly well that his bladder is uncomfortable—he's prancing around restlessly and crossing his legs. But the other half of him that's absorbed in play refuses to do anything about it. There's nothing to be concerned about if a slight "accident" occurs once in a while with a small child when he's deeply absorbed. But if he's stalling and procrastinating all the time, about everything, it's usually a sign that he's being pushed and bossed too much. It's become such a habit to resist that he does it, not just when his parents but when his own insides tell him there is something he ought to be doing. This is often called laziness, but actually it requires a lot of effort. It's like a car being driven with the brakes on.

A few children, even happy, well-adjusted ones, have trouble controlling the bladder when they are excited or frightened or laugh suddenly. At these times they find themselves wetting without any warning. This is not a disease and it's not an entirely strange thing. Many animals automatically empty the bladder when they are alarmed. The child only needs to be reassured that he has done nothing to be ashamed of.

434. **Frequent urinating.** Frequent urinating has several possible causes. When it develops in a child who was not frequent before, it may mean some disease such as an infection of the urinary system or diabetes. The child and a urine specimen should be examined promptly by the doctor.

A few individuals, even calm ones, seem to have bladders that never hold as much as the average, and this may be the way they were made. But most of the children (and adults, too) who regularly have to urinate frequently are somewhat

high-strung or worried. In one case it's due to a temporary strain; in another it's a chronic tendency. Even the healthy, normal athlete is apt to have to go to the toilet every 15 minutes just before a race. The parents' job, then, is to find out what, if anything, is making the child tense. In one case it's the handling at home, in another it's his relations with other children, in another still it's school. Most often it's a combination of these. A common story is the timid child and the teacher who seems severe. To begin with, the child's apprehensiveness keeps his bladder small. Then he worries about asking permission to be excused. If the teacher makes a fuss about his leaving the room, it's worse still. It's wise to get a note from the doctor, not simply requesting that the child be excused, but explaining the child's nature and why his bladder works that way. If the teacher is approachable and the parent is tactful, a personal visit will help, too.

435. **Difficult urination.** Once in a great while a baby, usually a boy, is born with such a small urinary opening that he has to push hard to pass his urine. The urinary opening needs to be enlarged promptly by a doctor. It is harmful to the inner passages and the kidneys to have the urine obstructed. The treatment is simple.

Occasionally in hot weather, when a child is perspiring a great deal and not drinking enough, he may pass his urine infrequently, perhaps not for 12 hours or more. What does come is scanty and dark and it may burn. The same thing may happen during a fever. A child in hot weather or when feverish needs plenty of chances and occasional reminders to drink between meals, especially when he is too small to tell what he wants.

A fairly frequent cause of painful urination in girls is an infection of the vagina, which inflames the lower urinary passage, too. This may make her feel as if she had to urinate frequently, though she may be unable or scared to do anything, or only pass a few drops. The doctor should be consulted and a urine specimen examined. Until he can be reached, she can be relieved by sitting several times a day in a shallow warm bath to which has been added a cup of bicarbonate of soda. After gently drying by blotting, a thick dab of petroleum jelly, or

boric-acid ointment, or zinc ointment, or plain cold cream can be applied to the urinary region to soothe and protect it.

436. **Sore on the end of the penis.** Sometimes a small, raw area appears around the opening or "meatus" of the penis. There may be enough swelling of the tissues here to close up the meatus and make it difficult for the boy to pass his urine. This little sore is a localized diaper rash, caused by ammonia. The ammonia is not passed in the urine, but is manufactured from urine by bacteria in the diaper, night clothes, and bedclothes. This ammonia sore occurs most often when the baby is a little over a year old, when the mother has stopped boiling his diapers or stopped using the diaper service. Sometimes the child is dry during the daytime, but always wets at night. In this case, the bacteria have accumulated in the pajamas, sheets, and pads, and they set to work making ammonia just as soon as the child wets himself in the evening. The important thing in treatment is to boil the diapers, pajamas, sheets, and pads every day as long as any sore exists. Meanwhile, the sore can be soothed and protected by frequent application of zinc ointment. If the child is in pain from being unable to urinate for many hours, he can be sat in a warm bath for half an hour. If this doesn't make him urinate, the doctor should be called.

Even after the sore is healed, it's better to continue to boil the night clothes and bedding as long as the baby continues to wet at night.

437. **Infections of the urinary tract (pyuria, pyelitis, pyelonephritis, cystitis).** Infections in the kidneys or the bladder may cause a stormy illness with a high, irregular fever. On the other hand, infection is sometimes discovered by accident in a routine urine examination in a child who hasn't felt sick at all. An older child may complain of frequent, burning urination, but most often there are no signs pointing to the urinary tract. These infections are commoner in girls, and in the first 2 years of life. Prompt medical treatment is necessary, and usually is successful.

A urine specimen should be examined any time a child has a fever without a known cause. It should also be examined any time a fever lasts more than a few days, even if there is a cold or sore throat to explain the temperature, since an infection

elsewhere in the body may spread to the urinary system and keep the fever going.

If there is a lot of pus, the urine may be hazy or cloudy, but a little may not show to the naked eye. On the other hand, a normal child's urine may be cloudy, especially when it cools, due to ordinary minerals in it. So you can't tell definitely from looking at the urine whether it is infected or not.

If a urinary infection does not clear up satisfactorily, or if the child ever has a second urinary infection, his whole urinary system should be investigated thoroughly with special examinations. Urinary infections are more common in children who have *abnormally* formed urinary passages. If there is anything pointing to such an abnormality, it should be corrected before permanent harm is done to the kidneys. For this reason it is wise, after a child has had a urinary infection, to check his urine again one and two months later to make sure the infection has not come back, even though he appears well.

438. **Pus in a girl's urine may not mean urinary infection.** There is always the possibility that pus in a girl's urine is coming from a vaginal infection, even one so mild that there is no visible inflammation or discharge. For this reason it should never be assumed that pus in an ordinary specimen means an infection of her urinary system without further investigation. The first step is to secure a "clean" urine specimen. That means to separate her labia, sponge her genital region briefly and gently with a piece of wet absorbent cotton, and blot dry with a soft towel or a piece of dry absorbent cotton, before letting her pass her urine for the specimen. If the clean specimen also shows pus, then the doctor can pass a catheter (a small rubber tube) into her bladder to obtain a specimen that has not touched her skin outside at all, to be absolutely sure.

VAGINAL DISCHARGE

439. **Treat it considerately.** It is fairly common for a young girl to develop a slight vaginal discharge. A majority of these are caused by unimportant germs and clear up in a short time. A thick, profuse discharge that is irritating may be caused by a more serious infection and needs prompt medical treatment. A mild one that persists for days should be examined, too. A

discharge that is partly pus and partly blood is sometimes caused by a small girl's having pushed some object into her vagina, which remains there causing irritation. If this is discovered to be the case, don't try to make her feel guilty or give her the idea that she has injured herself. It does not come from any vicious tendency but from a natural desire to explore and experiment.

As explained in Section 303, the girl, particularly between the ages of 3 and 5, may be upset because her body is not shaped like a boy's. This sometimes leads to handling of the genitals, which in turn may cause mild vaginal irritation. If the grownups show anxiety about her genitals, it may make her more alarmed. The burning sensation from a slight discharge can often be relieved without fuss by sitting her, twice a day, in a bath to which bicarbonate of soda has been added, then a dab of petroleum jelly or boric-acid ointment can be applied after the bath. The main thing is to cheerfully reassure her that nothing's wrong—that it's just a little itch.

STOMACH-ACHES AND UPSETS

440. **Call the doctor. Don't give cathartics.** You certainly should get in touch with the doctor for any stomach-ache that lasts as long as 2 hours, whether it is severe or not. There are dozens of causes. A few of them are serious, most are not. A doctor is trained to distinguish between them and prescribe the right treatment. People are apt to jump to the conclusion that a stomach-ache is either due to something that has been eaten, or to appendicitis. Actually neither of these is a common cause. Children can usually eat strange foods or an unusual amount of a regular food without any indigestion.

It is wrong to give a cathartic before the doctor has seen the child, because there are some stomach-aches for which a cathartic is dangerous. Before you call the doctor, take the child's temperature, so that you can tell him what it is. The treatment, until you reach him, should consist of putting the child to bed, and giving him nothing to eat. If he's thirsty, give him small sips of water.

441. **Common causes of stomach-ache.** In the early weeks

of life "stomach-ache" is common in *indigestion* and *colic*. This is discussed in Sections 99 and 100.

There is a rare condition called *intussusception*, which causes sudden severe cramps in a baby or child who has seemed otherwise healthy. The cramps come a number of minutes apart, and between them the baby may be fairly comfortable. Vomiting is apt to occur and be repeated. After a number of hours (during which there may be normal or loose movements) a movement is passed containing mucus and blood—a "currant jelly," or "prune juice" stool. This condition occurs most commonly between the ages of 4 months and 2 years, though it may occur outside this age period. It is rare, but it requires emergency medical treatment, without delay, and that is why it is mentioned here.

After the age of a year, one of the commonest causes of stomach-ache is the onset of a simple *cold* or *sore throat* or *grippe*, especially when there is fever. It is just a sign that the infection is disturbing the intestines as well as other parts of the body. In the same way almost any infection may cause vomiting and constipation, especially in the beginning. A small child is apt to complain that his tummy hurts when he really means that he feels nauseated. He often vomits soon after this complaint.

There are many different kinds of *stomach and intestinal infections* that cause stomach-ache, sometimes with vomiting, sometimes with diarrhoea, sometimes with both. These are often loosely called "intestinal flu" or "intestinal grippe," meaning a contagious disease caused by an unknown germ. These infections often pass through several members of a family, one after the other. Some epidemics of "intestinal flu" turn out to be dysentery or paratyphoid infections. There may or may not be fever with any of them.

"*Food poisoning*" is caused by eating food that is heavily contaminated with poisonous bacteria. The food may or may not have tasted queer. Food poisoning seldom occurs from food that has been thoroughly and recently cooked, because the cooking will kill these germs. It's caused most often by pastries filled with custard or whipped cream, and poultry stuffing. Germs multiply readily in these substances if they remain out

of the refrigerator for many hours. Another cause is improperly home-canned foods.

The symptoms of food poisoning are usually vomiting, diarrhoea, and stomach-ache. Sometimes there are chills and sometimes fever. Everyone who eats the contaminated food is apt to be affected by it to some degree at about the same time, in contrast to an "intestinal flu" which usually spreads through a family over a number of days.

Children with *feeding problems* often have stomach-aches when they sit down to a meal or after they have eaten a little. The parents are apt to think the child has made up the stomach-ache as an excuse not to eat. I think that it's more likely that his poor stomach is all tightened up by his tense feeling at mealtimes, and that the stomach-ache is real. The treatment here is for the parents to handle mealtime in such a way that the child enjoys his food. (See Section 357.)

Children who have never been feeding problems, but who have other *worries* can have stomach-aches too, especially around mealtime. Think of the child who is nervous about starting school in the fall and has a stomach-ache instead of an appetite for breakfast, or a child who feels guilty about something that hasn't been found out yet. All kinds of emotions, from fears to pleasant excitement, can affect the stomach and intestines. They can cause not only pains and lack of appetite, but vomiting and diarrhoea and constipation.

A few children who have worms seem to have stomach-aches from them, but most aren't affected that way. There are other infrequent causes of stomach-ache, too: chronic indigestion with gas, intestinal allergies, inflamed lymph glands in the abdomen, rheumatic fever, kidney disturbances, and so on. As you can well see, a child who has pains—whether they are acute and severe, or mild and chronic—needs a thorough check-up by the doctor.

442. Appendicitis. Let me at the start contradict some common notions about appendicitis. There isn't necessarily any fever. The pain isn't necessarily severe. The pain doesn't usually settle in the lower right side of the abdomen until the attack has been going on for some time. Vomiting doesn't always

occur. A blood count doesn't prove that a stomach-ache is or isn't due to appendicitis.

The appendix is a little offshoot from the large intestine about the size of a short earthworm. It usually lies in the central part of the right lower quarter of the abdomen. But it can be lower down, or over toward the middle of the abdomen, or as far up as the ribs. When it becomes inflamed, it's a gradual process, like the formation of a boil. That's why a sudden severe pain in the abdomen, that lasts a few minutes and then goes away for good, isn't appendicitis. The worst danger is that the inflamed appendix will burst, very much as a boil bursts, and spread the infection all through the abdomen. This is called peritonitis. An appendicitis that is developing very rapidly can reach the point of bursting in less than 24 hours. That's why any stomach-ache that persists for as long as 2 hours should be seen by a doctor, even though nine out of ten cases will prove to be something else.

In the most typical cases there is pain around the navel for several hours. Only later does it shift to the lower right side. There is apt to be vomiting, once or twice, but it doesn't always occur. The appetite is usually diminished, but not always. The bowels may be normal, or constipated, rarely loose. After it's gone on a few hours, the temperature is apt to be elevated to 100 or 101 degrees, more or less, but it's possible to have real appendicitis without any fever at all. The person may feel more pain when he pulls his right knee up, or when he stretches it way back, or when he walks around. You can see that the symptoms of appendicitis may vary a lot in different cases and that you need a doctor to make the diagnosis. The doctor is guided most by whether he finds a tender area in the right side, as he feels deeply but gently into every part of the abdomen. You will notice that he doesn't ask whether it hurts every time he pokes, but on the contrary tries to distract the child from what he is doing. This is because many children with a pain in the stomach, specially young ones, are delighted to say, "Yes, that hurts," every time they are asked. When the doctor finds a tender spot in the right side of the abdomen, he is suspicious of appendicitis, but he sometimes likes to have a blood count to

help him decide. A raised blood count just says there is infection somewhere. It doesn't say where it is.

It's often impossible for the most expert of doctors to be absolutely sure whether a child has appendicitis or not. When there is much suspicion he advises operation, and for a very good reason. If it is appendicitis it is dangerous to delay, but if it is not, no great harm has been done by the operation.

443. **Chronic starch indigestion.** There's a fairly rare disease, that most often begins between the ages of 1 and 3, in which the child loses his ability to digest the starch in his diet. He has large, loose movements for months, either off and on or all the time. When the condition is bad, the stools are foamy, float in the toilet, smell bad. The child gets thinner and thinner but has a big potbelly. This condition is mentioned here only to be sure that if your child should develop a chronic diarrhoea at this age, you get him to a children's specialist before too many days go by, no matter how difficult it might be. A mild case may be cured by removing all starch (cereal, bread, crackers, cake, potatoes, macaroni, noodles, etc.) from the diet, for a number of months. A severe case has to live on such foods as sour milk, cottage cheese, ripe bananas, eggs, and meat until there is great improvement; then fruits and vegetables are cautiously added. Extra fish-liver oil and vitamin B complex are needed while the diet is limited.

444. **Worms are no disgrace, but need treatment.** It horrifies a mother to find worms in her child's movement, but there is no reason to be distressed or to decide that the child has not been properly cared for.

Pinworms (or threadworms) are the commonest variety. They look like white threads, a third of an inch long. They live in the lower intestine, but come out between the buttocks at night to lay their eggs. They can be found there at night or in the bowel movement. They cause itching around the anus, which may disturb the child's sleep. In former days worms were thought to be the chief cause for children's grinding their teeth at night, but this is probably not so. Save a specimen of the worms to show the doctor. There is an efficient treatment for pinworms which a doctor should supervise.

Roundworms look very much like earthworms. The first sus-

picion comes when one is discovered in the bowel movement. They usually don't cause symptoms unless the child has a great number of them. The doctor will prescribe treatment.

Hookworm is common in some parts of the southern United States. They may cause malnutrition and anemia. The disease is contracted by going barefoot in soil that is infested. A doctor can prescribe treatment.

RUPTURES, HERNIAS, HYDROCELE

445. **Ruptures, or hernias.** The commonest rupture of all, protruding navel, is taken up in Section 118.

The next commonest is what doctors call inguinal hernia. There is meant to be a small passage from inside the abdomen, down along the groin, into the scrotum, for the blood vessels and nerves that go to the testicles. This passageway has to pass through the layers of muscle that make up the wall of the abdomen. If these openings in the muscles are larger than average, a piece of intestine may be squeezed out of the abdomen and down the passageway when the child strains or cries. If the intestine only goes partway down, it makes a bulging in the groin. If it goes all the way down into the scrotum (the pouch for the testicles behind the penis), the scrotum looks very enlarged for the time being. Inguinal hernia does occur, though less commonly, in girls. It appears as a protrusion in the groin.

"Rupture" is a bad name for a condition like this, because it sounds as though something had broken when the intestine was pushed down during straining. This idea makes a mother worry unnecessarily about her baby's crying. Actually nothing breaks. The overlarge passageway is present at the time the baby is born; it is the way he is made.

In most hernias the intestine slips back up into the abdomen when the baby or child is lying down quietly. It may push down every time he stands up, or it may go down only once in a great while when he strains hard.

Most hernias don't cause any serious trouble. Some of them stop coming down after a few months or years, because, as the child grows, the openings in the muscle wall tend to become smaller. That is why, with many hernias, doctors recommend waiting a few years before considering operation, to see what

nature can do. If the hernia continues to come down for years, it is better to close the openings in the muscle by operation, for two reasons. A hernia is rather uncomfortable for an older boy, particularly when he is doing athletics, and it is wrong to keep him out of games and sports if he is otherwise healthy. There is also the slight danger that the hernia might become "strangulated."

A "strangulated" hernia means that the intestine, when it is pushed down in the passageway, gets twisted and shuts off its blood supply. It is a dangerous condition that requires immediate operation. However, it's a pretty rare complication of hernias, and you should not be dreading it. That attitude would harm the child. If it happens, your child will let you know by having crampy pain, loss of appetitie, and probably vomiting.

If your baby has a hernia and you notice sometime that it has not gone back into his abdomen when he is lying quietly, you should not try to force it back by squeezing the scrotum. If he's comfortable, it will not harm him. The most that you might do is elevate his hips on a pillow so that gravity will help to slide the intestines back. If it doesn't go back and the baby seems uncomfortable, get in touch with your doctor right away. If your baby has a hernia, don't worry about his crying and straining. It isn't dangerous for his intestine to be pushed into his scrotum and you will spoil him if you pick him up *every* time he whimpers.

Sometimes trusses of various kinds are recommended to press over the opening in the muscle wall, to keep the intestine inside the abdomen. The doctor has to decide in each individual case.

446. **Hydrocele, or swelling around the testicle.** Hydrocele is often confused with hernia or rupture, because it also causes a swelling in the scrotum. Each testicle in the scrotum is surrounded by a delicate sac which contains a few drops of fluid. This helps to protect the testicle. Quite often in newborn babies there is an extra amount of fluid in the sac which surrounds the testicle, and this makes it appear to be several times its normal size. Sometimes this swelling takes place at a later period.

A hydrocele is nothing to worry about. The fluid in most cases will diminish as the baby gets older, and then nothing needs to be done for it. Occasionally an older boy has a chronic

hydrocele, which should be operated on if it is uncomfortably large. You can usually distinguish between a hydrocele and a hernia, because the hydrocele stays about the same size from day to day. The hernia swells the scrotum when the child is standing or straining, but usually goes away when he's relaxed and lying down.

EYE TROUBLES

447. Reasons for seeing the eye doctor. A child needs to go to an eye doctor if his eyes turn in (cross eyes) or out (wall eyes) at any age, if he is having *any* trouble with his schoolwork; if he is complaining of aching, smarting, or tired eyes; if his eyes are inflamed; if he is having headaches; if he holds his book too close; if he cocks his head to one side when looking at something carefully; or if his vision is found to be defective by the chart test at school. However, just because a child can read a chart satisfactorily in school does not mean for sure that his eyes are all right. If he is having symptoms of eyestrain, he should be examined anyway. To be completely sure, it is a good idea to take a child to the oculist when he starts school. It is not absolutely necessary, however, if the school tests his vision yearly, and he has no symptoms. Chart testing, at school or the doctor's, should be done each year after 6.

Nearsightedness, which is the commonest eye trouble that interferes with schoolwork, develops most often in the age period between 6 and 10. It can come on quite rapidly, so don't ignore the signs of it (holding the book closer, having trouble seeing the blackboard at school) just because the child's vision was all right a few months before.

Inflammation of the eye can be caused by many different infections. Most of the mild cases are caused by ordinary cold germs, and accompany colds in the nose. You should be more suspicious of inflammation when there is no nose cold. It is a good idea to get in touch with your doctor anyway, but particularly when the white of the eye becomes reddened, or when there is pus.

448. Specks. Specks in the eye should be removed promptly. It is always preferable to let a doctor do this if possible. It is

absolutely necessary to go to a doctor if the speck has not been removed in half an hour. A speck that stays imbedded over the pupil or iris for several hours may cause a serious infection. There are three methods you can try if it is difficult to reach the doctor. The first is to draw the upper eyelid down and away from the eye, holding it by the lashes. This gives the tears a chance to wash the speck out. Next, you can use an eyecup, containing a sterile 2 per cent solution of boric acid (2 level teaspoonfuls of boric-acid powder in a cupful of boiled water). The child tips his head down, applies the filled eyecup to his eye, straightens his head up, blinks several times with the cup against the eye. The third method is to examine the inside of the upper lid. This is where most specks are lodged. You will need a clean cotton swab (made on a toothpick or matchstick), and a plain match or toothpick. Tell the child to look down and *keep* looking down. This relaxes the upper lid. Take hold of the eyelashes of the upper lid, pull the lid down as far as it will go, lay the matchstick horizontally across the middle of the lid, and fold the eyelash back over the matchstick. While you hold the lid firmly folded back, reach for the cotton swab. If you see the speck on the lid, gently wipe it off with the swab. You will need a good strong light. If you can't find the speck and the pain goes on, or if the speck is lodged on the eyeball, go to an eye doctor promptly. Don't try to remove a speck from the eyeball yourself.

449. Styes. A stye is an infection in a hair follicle of the eyelashes, and is similar to a pimple anywhere else. A stye is caused by ordinary pus germs which happen to be rubbed onto the eyelid. The stye usually comes to a head, breaks, heals, and no treatment is necessary. An adult with a stye feels more comfortable if he puts on hot applications, and this may hasten its coming to a head and breaking, but it makes no great difference. A child doesn't want to be bothered. The main trouble with styes is that one often leads to another, probably because when the first one breaks the germs are spread to other hair follicles. This is a reason for trying to keep a child from rubbing or fingering his eyelid at the time a stye is coming to a head or discharging. If a child has several styes in succession, he should be examined by his doctor, and have a urine analysis.

Styes occasionally mean that a person has some condition that lowers his resistance.

A mother with a stye should wash her hands thoroughly before doing things for a baby or small child, especially if she has touched her stye, because the germs are easily passed from person to person. A father or brother with a stye had better not handle the baby temporarily.

CONVULSIONS

450. A convulsion is a frightening thing to see in a child, but in most cases it is not dangerous in itself. Telephone for the doctor. If you cannot reach him right away and the child is feverish, give him an alcohol rub. Use equal parts alcohol and water, water alone if you have no alcohol. With your wet hand rub each limb for a minute or two, then chest and back. The convulsion is usually over and the child asleep before the doctor arrives.

In most convulsions the child loses consciousness, the eyes roll up, the teeth are clenched, and the body or parts of the body are shaken by twitching movements. The breathing is heavy, and there may be a little frothing at the lips. Sometimes the urine and bowel movement are passed.

Convulsions are brought on by irritation of the brain, from a number of different causes. The causes are different at different age periods. In the newborn baby they are usually due to injury to the brain. During the first year they may be a sign of *tetany* which results from insufficient vitamin D. In the young child, between 1 and 5, the commonest cause is sudden fever at the onset of colds, sore throats, and grippe. Fever coming on so quickly seems to make the nervous system irritable. Lots of children of this age are trembly at the start of their fevers, even though they don't have convulsions. So if your child around 2 or 3 has a convulsion at the onset of a fever, it doesn't necessarily mean that he has a serious disease, and it doesn't mean that he's going to have more convulsions in later life.

Epilepsy is the name given to convulsions that occur repeatedly in the older child, without any fever or other disease. Nobody knows the real cause. There are two different forms of

epilepsy. In "grand mal" attacks, the person loses consciousness completely and has convulsions. In "petit mal," the attack is so brief that the person doesn't fall or lose control of himself; he may just stare or stiffen momentarily.

Every case of epilepsy should be investigated by a doctor familiar with the disease. Though the condition is usually a chronic one, there are several drugs which are helpful in stopping or reducing the frequency of the spells. There are other causes of convulsions less common than these which have been mentioned.

If your child has a convulsion, you should, of course, get hold of your doctor immediately. However, there is no need to feel frantic if he can't get there right away, since the commonest causes, fever in the young child and epilepsy in the older child, do not call for any definite emergency treatment. In the case of the child with fever, the point of the alcohol rub mentioned above is to bring the fever down a little. If the convulsion is over, and the doctor has not arrived, and the child can be roused, it's a good idea to give him half an aspirin tablet. This will bring the fever down and lessen the chance of a second convulsion. Convulsions are rare after the first day of a fever. The brain seems to become used to the heat.

First Aid

CUTS, HEMORRHAGE, AND BURNS

451. Soap and pure water for cuts and scratches. The best treatment for scratches and small cuts is to wash them with soap and pure water on a piece of sterile absorbent cotton. Then rinse the soap off with plenty of clear water. Ask your doctor whether the water you use is pure enough to wash wounds with. If not, you can keep a bottle of hydrogen perox-

ide to use for this soaping and rinsing. An antiseptic is less important than careful washing. The one that has been most commonly used is tincture of iodine, half strength (3½ percent). It has two disadvantages. It stings severely, and this scares small children. It burns raw flesh, and this makes a cut slower to heal, particularly when it is deep. Mercurochrome, on the other hand, when made with water, does not sting, but many doctors feel that it is too weak a germkiller to be reliable. Tincture of metaphen, 1 to 200, is generally considered a good antiseptic. It stings somewhat, though not nearly so much as iodine, and it does not burn the tissues. Ask your doctor what he prefers.

If you do use iodine, buy the half-strength solution; keep it well stoppered. The alcohol evaporates if it isn't tightly stoppered, and leaves a much stronger solution. Buy a new bottle whenever it looks as if the old one had evaporated considerably. Never put an airtight bandage over iodine. It will keep the iodine itself from evaporating off the skin, and cause a burn. Any bandage over iodine should be held in place by narrow strips of adhesive, so that there is plenty of chance for the air to reach it. Don't put iodine on wet skin, or use it with any other antiseptic.

For large cuts that gape open you should of course consult your doctor. It is good to have expert care for cuts on the face, even when they are small, since scars are more noticeable there, and also for cuts on the hand and wrist, because of the danger of cut nerves and tendons.

Wounds that might be contaminated by any street dirt or soil that contains manure should be reported to your doctor. Manure frequently carries the germs of tetanus (lockjaw). The doctor may recommend a tetanus injection, especially for deep cuts or puncture wounds.

Animal bites. Get in touch with the doctor promptly. Meanwhile, first aid is the same as for cuts. The important thing is to keep track of the animal to be sure he is not developing rabies. If the animal does develop rabies, or if he cannot be traced, the doctor will give rabies inoculations.

452. **Bandaging.** Let the antiseptic dry before applying a bandage. What you use for bandaging depends on the size and location of the scratch or cut. Small prepared sterile bandages

are good for most small wounds. On the palm they won't stick. For larger cuts and scratches use a sterile gauze square ("dressing"). It can be held in place by narrow strips of adhesive, or by gauze roll bandage. In the latter case, you had better end up with a few narrow strips of adhesive to keep the bandaging in place. (A small child can loosen a bandage in no time at all.) Any bandaging will have to be snug to do any good, but it shouldn't be tight enough to squeeze or bind, for fear of shutting off the circulation.

Don't wrap adhesive all the way around the arm or leg (so that it overlaps itself), because this might shut off the circulation. If the foot or hand becomes at all swollen or darker in color after the leg or arm has been bandaged, it means that the bandage is too tight. It should be loosened right away. It's all right to wrap a small prepared bandage around a finger if it's not too tight. When you use strips of adhesive to hold a bandage in place, cut them narrow so that you don't shut out all the air. But they will stay in place better if you make them plenty long.

A wound will heal quicker and be less apt to become infected if you don't disturb the bandaging too often. If it becomes too loose or dirty-looking, apply a new layer on top of the old. Take a bandage off very gently. Peel the inner layer back in the same direction as the cut runs. (For instance, if the line of the cut runs up and down the arm, peel the bandage up or down the arm.) In this way there is less likelihood of pulling the edges of the cut apart. A cut may throb the first day and night, and this doesn't mean much. If it becomes increasingly painful later, it may be due to infection. Then the bandage should be removed to see what is happening. If there is a newly developed swelling or redness, the doctor should see it.

Barked knees, after being washed and painted with an antiseptic, are best left unbandaged until a dry scab is formed. Otherwise the bandage gets stuck and pulls off the scab when it is changed.

Bandaging a finger. A child's finger is the part most frequently bandaged and the most difficult to bandage. Wrap a sterile guaze square around the finger, but trim it down first so that it doesn't stick far beyond the end of his finger.

Using a 1-inch-wide roll of guaze bandaging, make several

trips back and forth over the top to cover it over, holding the ends of the loops between thumb and finger of your other hand. Now begin circling the bandage.

This is the hardest part: getting around the bulky sterile square and the lengthwise loops of bandage, getting between the child's fingers, keeping a firm hold with the other thumb and finger so that the whole thing doesn't spin off. Circle gradually up and down the finger a couple of times and then cut. Anchor the end with a small piece of adhesive tape.



Now take a narrow strip of adhesive tape about a foot long, apply one end to the base of the bandage on the palm side, run to the end of the finger, over the end, up the back side of the bandage, up the back of the hand, and half way up the arm. When you are sticking the adhesive to the back of the hand and arm, have the child's finger and wrist partly bent over; otherwise the adhesive will act as a halter holding the finger up straight. With another piece of adhesive circle the middle of the bandage once more, snugly, to hold it together and to keep the lengthwise strip of adhesive from coming loose.

453. **Bleeding (hemorrhage).** Most wounds bleed a little for a few minutes, and this is good because it washes out some of the germs that were introduced. It's only profuse or persistent hemorrhage that needs special treatment.

Bleeding of the hand, arm, foot, or leg will stop sooner if the part is elevated. Have the child lie down, and put a pillow or two under the limb. If the wound continues to bleed freely, press on it with a sterile gauze square until it stops or until you decide to bandage it. Clean and bandage the wound while the limb is still elevated.

If the wound was made in a clean way (with a knife, for instance) and bled freely, don't try to wash the cut itself but clean

around it gently (soap and water, or soap and hydrogen peroxide on sterile cotton). If the wound still contains dirt, clean inside the cut, too. Then apply the antiseptic.

When bandaging a cut that has bled a lot or is still bleeding, use a number of gauze squares on top of each other, so that you will have a thick pad over the cut. Then, when you snugly apply the adhesive or gauze roll bandage, it will exert more pressure on the cut and make it less likely to bleed again. This is the principle of the "pressure bandage."

If a wound is bleeding at an alarming rate, don't wait to find the right bandages. Stop the bleeding with pressure immediately and wait for someone else to bring the bandages. Elevate a limb if possible. Make a pad of the cleanest material you have handy, whether it's gauze squares, a clean handkerchief, or the cleanest piece of clothing on the child or yourself. Press the pad against the wound, and keep pressing until help arrives, or until the bleeding stops. Don't remove your original pad. As it is soaked through, add new material on top. If the bleeding is easing up, and you have suitable material, apply a pressure bandage. The pad over the wound, made of a number of gauze squares or folded material of the cleanest available, should be thick enough so that when it is bandaged it will press on the wound. A small pad is enough for a finger, but a thick dressing will be necessary for a thigh or abdominal wound. Bandage snugly with gauze bandage or adhesive tape or long strips of any kind of material. If the pressure bandage doesn't control the bleeding, continue hand pressure directly over the wound. If by chance you are in a situation where you have no cloth or material of any kind to press against a wound that is bleeding alarmingly, press with your hands on the edges of the wound, or even in the wound.

A great majority of even serious hemorrhages can be stopped by simple direct pressure. If you are dealing with one which can't, and if you have learned in a first-aid class how to apply a tourniquet, then go ahead. It's seldom necessary, though, and it's nothing that a novice should try to learn for the first time in an emergency. It *must* be loosened every 30 minutes.

454. Nosebleeds. There are a number of simple remedies for nosebleed. Just having a child sit still for a few minutes is often

sufficient. To avoid his swallowing a lot of blood, have him sit up with his head bent forward, or, if he's lying down, turn his head to the side so that his nose points slightly down. Keep him from blowing his nose or from pressing and squeezing it with his handkerchief. It's all right to hold the handkerchief gently against the nostril to catch the blood, but moving the nose around helps to keep up the bleeding.

Cold applied to any part of the head constricts the blood vessels and helps to stop a hemorrhage. Place something cold against the back of the neck, or the forehead, or the upper lip. A cloth wrung out in cold water, an ice bag, or a cold bottle from the icebox, will do.

If the nosebleed continues for 10 minutes in spite of these measures, get in touch with the doctor. If you have a bottle of nose drops of the kind that shrink the tissues, wet a small, loose wad of cotton with the nose drops and tuck it into the front part of the nostril. Nosebleeds usually occur from the front part of the nose. You can sometimes stop a severe hemorrhage by gently pinching the lower part of the nose for 10 minutes. Let go slowly and gently.

Nosebleeds occur most frequently from blows on the nose and from colds and other infections. If a child has repeated hemorrhages from no apparent cause, he needs to be examined by a doctor to make sure he has none of the general diseases that sometimes cause nosebleeds. If no disease is found, it may be necessary to cauterize (burn) the exposed blood vessel that is always breaking. The proper blood vessel to cauterize can only be discovered right after a hemorrhage.

455. **Burns.** The treatment of burns has changed a lot in recent years and is continuing to change. It is a good idea to ask your doctor ahead of time what he recommends in case of emergency.

In case of a burn call the doctor for instructions before doing anything else. If he is not there, ask the office to reach him and have him call you as soon as possible. Meanwhile give first-aid treatment. Then, if the burn is severe and it looks as though you could reach a hospital sooner than you will hear from the doctor, start for the hospital.

One satisfactory first-aid treatment is to apply plain petro-

leum jelly (petrolatum), or boric ointment, and cover loosely with clean bandage. If you have no ointment, you can use clean vegetable fat (shortening).

Another method, clumsier than ointment, is to cover the burn with clean gauze pads wet with soda-bicarbonate solution (a level teaspoonful to a cup of water). Hold them in place with loose bandaging and moisten from time to time with more of the solution, until you can get ointment for a small burn or get a doctor for a larger one.

The tannic-acid method, which has been in use for a number of years, is no longer so well thought of, at least for some burns. It is dangerous for burns that encircle fingers, toes, or limbs, because the tough scab may cut off the circulation. For large burns it is less safe than newer methods, now that we have drugs to prevent infection.

If your child should be severely burned over an area too large to bandage easily, you can ease his pain and shock by putting him immediately into a warm *not hot* bath, leaving on the clothes that are difficult to take off, until the doctor or ambulance arrives. Someone should stay with him. As soon as you are ready to move him to the hospital, wrap him in a wet sheet, and over that a blanket. It's the air hitting a bare burn that causes the pain.

It is much safer to consult a doctor for any burns that cause blisters or raw spots. Some of the blisters are apt to break, and infection easily occurs under the edges of a broken blister.

If you have to deal with one or two small, unbroken blisters without the help of a doctor, don't open them or try to puncture them with a needle. There is less danger of infection if you leave them alone. Small blisters sometimes reabsorb without ever breaking; or, if they break after several days, the new skin will be pretty well formed underneath. But when a blister does break, it is better to cut all the loose skin off. Use a pair of nail scissors and a pair of tweezers, both of which have been boiled for 10 minutes. Then cover with a sterile bandage coated with petroleum jelly or boric ointment. If a blister becomes infected, as shown by pus in the blister, and redness around the edge, you should certainly consult your doctor. If this is im-

possible, cut away the blister and use wet dressings (Section 457).

Never put iodine or any similar antiseptic on a burn of any degree. It will make matters worse.

456. Sunburn. The best thing for sunburn is not to get it. Severe sunburn is painful, dangerous, and unnecessary. A half-hour of direct sunshine at a beach in summer is enough to cause a burn on a fair-skinned person who is unused to exposure.

Better to take too little sun the first days on the beach or in the country than too much. You can't tell when the skin's had enough from looking at it or feeling it. It takes hours for a burn to show. A good rule for the first few days at the beach it to keep the child's face, body, and legs covered or shaded except for the period when he is actually going into the water. That means a hat to shade the forehead and nose, a shirt to cover the shoulders, and overalls to protect the legs, especially the back of the knees while lying on the stomach.

"Tanning" lotions that promise to make a nice tan without burning may help a little, but they can't protect against a large amount of sunshine.

For relief of sunburn you can apply plain cold cream or petroleum jelly. With a moderately severe burn a person may have chills and fever and feel sick. Then you should consult a doctor, because sunburn can be just as serious as a heat burn. Keep sunburned areas completely protected from sunshine until the redness is gone.

457. **Wet dressings for skin infections until you can reach the doctor.** If a child has a boil, or an infection of the end of his finger, or around his fingernail or toenail, or an infected cut, or any similar type of infection under his skin, it should be seen by the doctor. Meanwhile, the child should be quiet, preferably in bed, with the limb elevated on a pillow.

If there is an unavoidable delay in reaching the doctor, the best first-aid treatment is to apply a continuous wet dressing. This softens the skin, hastens the time when it breaks to allow the pus to escape, and keeps the opening from closing over again too soon.

You can make a solution by boiling a cupful of water and

adding a tablespoonful of epsom salt, or magnesium sulfate, or table salt.

Make a fairly thick bandage over the infection and pour enough of the salt solution into the bandage to make all of it wet. Every few hours, when it begins to dry, add more solution.

You can keep it wet longer, especially at night, and keep the child's clothes and bedclothes drier, by covering the whole dressing with a piece of waterproof material, such as oiled silk, which you can buy at the drugstore. Put on a large enough piece to extend beyond the edges of the bandaging, and hold it in place with strips of adhesive tape. (Don't run adhesive tape completely around an arm or leg—it may cut off the circulation.)

If a child has fever with a skin infection, or if there are red streaks running up his arm or leg, or if he has tender lymph glands in his armpit or groin, the infection is spreading seriously and should be considered a real emergency. Get the child to a doctor or a hospital, even if you have to drive all night. Modern drugs are vitally important in serious infections.

SPRAINS, FRACTURES, HEAD INJURIES

458. **Sprains usually need examination and treatment.** If your child sprains his ankle, have him lie down for a half hour or so and elevate the foot on a pillow. This will keep the deep hemorrhage and swelling to a minimum. If swelling occurs, you ought to consult your doctor, because it is possible that a bone has been cracked or broken.

A sprained knee should always be seen by a doctor and treated carefully. A neglected knee sprain in which a cartilage has been injured may not heal properly, and may give trouble for years. If a child has fallen on his wrist and it remains painful, either when it is still or when it is moved, you have to suspect a fracture, even though there is no crookedness or swelling.

You can say, then, that any sprain that continues to be painful or that swells should be examined. This is not only because of the possibility of fracture, but also because most sprains will be much more comfortable if they are splinted or bandaged correctly. Many sprains and partial fractures will be numb for an hour or so and then become more and more painful.

459. **Fractures.** The brittle bones of adults really break. The softer bones of children are more apt to bend and splinter a little ("greenstick" fractures). Another type of fracture in a child is loosening or breaking off of the growing end of a bone. This is particularly apt to happen at the wrist. When a child has had a severe fracture, it is easy enough for anyone to see. But there are some common fractures that don't look especially deformed. A broken ankle can look straight enough, but there is considerable swelling and pain. A black and blue spot will appear after a number of hours. Only a doctor can distinguish between an ankle that is severely sprained and one that is broken, and he often needs an X ray to tell. A wrist can be broken without being out of line enough for you to realize it. Finger bones are often chipped when a ball is caught on the end of a finger. There is only swelling and later some blueness. A vertebra (one of the bones in the spine) is sometimes slightly crushed when a child falls on his behind. Nothing shows outside, but he complains of pain when he curves his body forward, or when he jumps and runs. In a general way, suspect a fracture if pain in a limb continues or if there is swelling, or if a black and blue mark appears.

Avoid further injury in a suspected fracture. Don't move the injured limb around. Don't let the child move it. If he's in a halfway comfortable place and you can get a doctor soon, keep him quiet where he is. If he has to be moved, put some kind of splint on first.

A splint to do any good must extend far enough up and down the limb. For an ankle injury, the splint should reach to the knee; for a break in the lower leg, it should go up to the hip; for a break in the thigh, you will need a board that goes from the foot to the armpit. For a broken wrist, the splint should go from the finger tips to the elbow, for a broken lower or upper arm it should go from the finger tips to the armpit. You will need a board to make a long splint. A short one for a small child can be made by folding a piece of cardboard. Move the limb with extreme gentleness when you are applying the splint to it, and try to avoid any movement where the break is. Tie the limb to the splint snugly in four to six places, using handkerchiefs, strips of clothing, or bandages. Two of the ties should be close to the

break, on either side of it, and there should be one at each end of the splint. For a back injury, it is even more important to leave the patient where he is if he can possibly be made comfortable there. If he must be moved, use a stretcher or a door. In picking up a person with a back injury, keep his back straight or arched inward (so that it is "hollow"). Never let his back curve outward. That means that when he is picked up, or if he has to be carried on a mattress or other makeshift stretcher which sags, he should be on his stomach. In case of a neck injury, the neck should be kept straight or, if curved at all, curved backwards. (His head should not bend forward.) For a broken collarbone (at the top of the chest in front), make a sling out of a large triangle of cloth and tie it behind the neck so that it supports the lower arm across the chest.

If a person with a serious injury has to be kept for some time in a cold place, protect him reasonably with blankets or with other clothing. Put a blanket under him. It is no longer considered wise to try to make a person in shock really warm with many hot blankets or hot-water bottles.

460. **Head injuries.** A fall on the head is a common injury from the age when a baby can roll over (and thereby roll himself off a bed). A parent usually feels guilty the first time this happens. But if a child is so carefully watched that he *never* has an accident, he is being fussed over too much. His bones may be saved, but his character will be ruined.

If, after a fall on the head, a baby stops crying within 15 minutes, keeps a good color, and doesn't vomit, there is little chance that he has injured his brain. He can be allowed to lead his normal life right away.

When a blow on the head is more severe, the child is apt to vomit, lose his appetite, be pale for a number of hours, show signs of headache, fall asleep easily, but be able to be roused. If a child has any of these symptoms, you should get in touch with your doctor. He may want to examine the child or have his skull X-rayed. The child should be kept as quiet as possible for 2 or 3 days and any new symptoms reported to the doctor immediately. It's a good idea to rouse the child once during the first night after the fall to make sure that he's not unconscious.

If he is not feeling his usual self the next day, the doctor should be notified again.

If a child loses consciousness, either right after a fall or later, he should certainly be examined by a doctor immediately. The same rule should apply, even without unconsciousness, if the child continues to complain of headache, trouble with his vision, or if he vomits later.

A swelling that puffs out quickly on a child's skull after a fall doesn't mean anything serious in itself if there are no other symptoms. It is caused by a broken blood vessel just under the skin.

SWALLOWED OBJECTS, CHOKING, POISONS

461. **Swallowed objects.** Babies and small children swallow prune pits, coins, safety pins, beads, buttons—in fact, anything you can mention. They seem to be able to pass most of these things through their stomachs and intestines with the greatest of ease, even open safety pins or a little broken glass. The objects that are more dangerous are needles and common pins.

If your child has swallowed without discomfort a smooth object like a prune pit or a button, you don't have to worry, or give him bread to push it along. Just watch the movements for a few days to reassure yourself that it has come out. Naturally, if he develops vomiting or pains in the stomach, or if an object gets painfully stuck in his gullet, or if he has swallowed a sharp object such as an open safety pin or a needle, you should consult the doctor immediately.

Never give a child who has swallowed an object a cathartic. It won't do any good and it may do harm.

462. **Choking.** When a child breathes or coughs something into his windpipe and is choking, hold him upside down and slap him vigorously on the back of his chest. If he keeps on choking and begins to turn blue, rush him to the nearest hospital or doctor's office. Let someone else telephone ahead. Don't wait for anything.

A sharp object stuck in the throat, like a fishbone, though very uncomfortable and gagging, is not dangerous like an object that is obstructing the breathing. You'd reach the doctor as soon as possible, but it isn't a matter of life or death. Lots of

times the object can't be found when the doctor examines the throat, though the child keeps saying it's there. In these cases the fishbone, or whatever it is, has been swallowed, but the child is still feeling the scratches left in his throat.

463. **Artificial respiration. Never give it if the person is breathing at all himself.** A person may stop breathing because of smothering, drowning, electric shock, inhaling poisonous gases (such as illuminating gas, exhaust fumes from an automobile, gas from a leaky, dampened coal stove). It is vitally important to give such a victim artificial respiration immediately, and to keep it up for as long as 4 hours if necessary, until he continues to breathe by himself or until expert help comes. It is best to learn artificial respiration in a first-aid class by actual practice.

If the victim has drowned, the water will run out of his air passages better if you lay him on a slight slope with his head downward. If the weather is at all cold, put a coat or blanket under him and over him, if available, or if somebody else can get them. Keeping the artificial respiration going is more important than anything else.

Lay the victim flat on his abdomen with his head turned to one side. If his face is turned to the left, his left arm should extend directly overhead and his right hand should be under his face. Tight clothing around the neck should be loosened. You kneel straddling his left leg (if his head is turned to the left), or both legs if he is a child—this is a matter of comfort. Place your hands on his lower chest so that the little fingers are lying over his lowest ribs, the tips of the fingers just out of sight as they curve around the sides of his chest. Shift your position up or down his leg so that when you are up on hands and knees your shoulders are directly over your hands. You start sitting on your heels with your elbows straight. Swing slowly up into the hands-and-knees position keeping your elbows straight. The weight of your body does the pressing. Don't put your full weight on a small child. The forward swing should take 2 seconds (Count one, two, slowly). Then swing back immediately, releasing all pressure and count one, two, again while you wait. Start the forward swing again. The whole cycle takes 4 seconds and should be repeated about 15 times a minute.

For an infant you should use another method. Rest him on his *back* on a table or across your knees. One of your hands goes under his neck and shoulders, the other under his thighs. Arch his whole body by raising his shoulders and thighs, until his thighs are pressed fairly firmly against his chest. Then straighten him out again. This flexing and straightening should be repeated about 30 times a minute.

464. **Objects in the nose and ears.** Small children often stuff things like beads and wads of paper into their noses and ears. The important thing is not to push the object any farther in, in your efforts to take it out. Don't even try to go after a smooth, hard thing. You are almost certain to push it in farther. You may be able to grasp a soft object, that isn't too far in, with a pair of tweezers.

With objects in the nose, have the child blow his nose. (Don't try this if he is so young that he sniffs in when told to blow.) He may sneeze the object out in a little while. If the object stays in, take him to your doctor or a nose specialist. Foreign objects that stay in the nose for several days usually cause a bad-smelling discharge tinged with blood. A discharge of this kind from one nostril should always make you think of this possibility.

465. **Poisons.** If your child has swallowed something that you think might be poisonous, **telephone your doctor** for advice. If you cannot speak to him *immediately,* have his secretary or the telephone operator be looking for him, or for some other doctor, to call you back. You should not be wasting more time on the telephone at this point but be trying to **make the child vomit** once or twice (see below). If you have no telephone, you should try first to make the child vomit, before setting out, unless you happen to live right around the corner from a hospital or a doctor.

If there is no one at the other end of the wire who knows how to reach a doctor for you, and you have tried for 3 or 4 minutes to make the child vomit, with or without success, telephone the nearest hospital or other doctors that you know of. (On the other hand, if there is an efficient secretary or operator who is on the track of someone, keep off the telephone yourself so that he can reach you.) If it looks as though you could get to a hospital sooner than you could get in touch with a doctor,

start for the hospital right away (after making or trying to make the child vomit).

The simplest method to cause vomiting, not always successful, is to slip your finger down his throat to make him gag. Run the ball of your finger along the roof of his mouth and then down the back of his throat, in an unhesitating way, and don't be afraid to *keep it there a few seconds, in motion, to make him gag thoroughly.* A brief gag probably won't be enough. If you hesitate on the way in or out you may be bitten. He can't bite while he's actually gagging. If it's some time since he's eaten, he will vomit more easily if you give him a glass of water or milk first. After he has vomited, give him another drink and make him vomit again.

If your child is old enough or co-operative enough to do something unpleasant, you can probably make him vomit by having him drink a glassful of water to which has been added a tablespoonful of salt, or a teaspoonful of mustard, or enough soap to make suds. This is called an emetic. After the child has vomited once, try to get him to take another glassful of emetic or the correct antidote and make him vomit again.

In the case of certain poisons, it is advisable to neutralize the poison by giving an antidote, if it is handy, either in the first or second drink that you give him to make him vomit. However, don't spend too much time worrying about finding the right antidote. The most important first step is to empty the stomach promptly. For instance, if a 4-year-old child has swallowed lye, and vinegar is within reach, mix ¼ glassful with ¾ glass of water, make him drink as much as possible, gag him if he doesn't vomit anyway. Then repeat. But if you don't know the antidote, or if there is no vinegar, or if he's a balky 2-year-old who won't touch it, give him water or milk which he *will* drink, and gag him. Then you could try some hastily made lemonade, for instance, for the 2nd drink. If he won't touch that, use water or milk again.

In the list below, the amount of a poison that would be highly dangerous for a one-year-old is specified, because accidental poisoning is most common at this age. Roughly speaking, a 45-pound 5-year-old would be similarly affected by double that dose, and a 90-pounder by 4 times that dose. However, a child

who has taken less than the amount listed should not be considered out of danger by any means. He should be treated just as thoroughly, and be under a doctor's care as soon as possible.

There is one further emergency measure you can take for a young child if you are quite sure he has taken a dangerous amount of poison, and if you are unable to make him vomit by the methods above, and if it's going to take half an hour or more to get to the doctor or hospital: Give him a dose of **syrup of ipecac** (2 teaspoonfuls for a child 2 or more, 1½ teaspoonfuls for one under 2 years), if you have it in the medicine cabinet, or can pick it up at the drugstore without delay. I would not use syrup of ipecac for doubtful poisoning, because the drug itself may have a harmful effect if not vomited.

Acids. See boric, carbolic, hydrochloric, nitric, and sulfuric acids.

Allonal. See barbiturates.

Ammonia. Treat the same as lye.

Amytal. See barbiturates.

Arsenic. Small amounts are dangerous. Give milk and induce vomiting.

Aspirin. A few individuals are usually sensitive to aspirin, but 2 or 3 tablets would not be seriously poisonous for most one-year-olds.

Atropine in drops or tablets. Induce vomiting promptly. Small amounts are dangerous.

Barbiturates. These include many of the sleeping tablets and capsules given to adults. Induce vomiting. Three strong tablets or capsules intended for adults would be a dangerous dose for a one-year-old.

Belladonna. See atropine.

Benzene. Induce vomiting. One teaspoonful is a dangerous dose for a one-year-old.

Bichloride of mercury usually comes in blue tablets to make antiseptic solutions. Induce vomiting repeatedly. Speed is vital. Eggs and milk are of some help as antidotes.

Boric acid. An ounce of the solution or a quarter teaspoonful of the powder would be dangerous for a one-year-old. Induce vomiting.

Carbolic acid. Induce vomiting, preferably with soapsuds. Eggs and milk are of some help as antidotes. Half a teaspoonful of a concentrated solution would be a dangerous dose for a one-year-old.

Cathartics. Some cathartic pills contain mixtures including strychnine. Three such pills would be dangerous for a one-year-old. Induce vomiting promptly. Cascara alone, phenolphthalein alone, milk of magnesia are not very poisonous.

Caustic lime, potash, soda. Same treatment as for lye.

Codeine tablets, or cough syrups containing codeine, in doses prescribed for adults may be serious for a one-year-old. Induce vomiting.

Cough syrups. See codeine. Patent cough syrups may contain, in a teaspoonful, an amount of codeine that is a full-sized dose for a one-year-old. Therefore 3 or 4 teaspoonfuls may be poisonous. Brown's mixture contains no codeine.

Cresol. See carbolic acid.

Drain cleaners. See lye.

Fly poisons. See arsenic.

Fowler's solution. See arsenic.

Gasoline. A teaspoonful is a dangerous dose for a one-year-old. Induce vomiting.

Hydrochloric acid. Dangerous when not very dilute. Give a teaspoonful of bicarbonate of soda in a glass of water and induce vomiting. Repeat. "Dilute hydrochloric acid" used in prescriptions for stomach ailments is not very dangerous.

Ink. Some inks contain a poisonous chemical. Induce vomiting if more than a taste has been swallowed.

Iodine. A few drops of tincture of iodine are not dangerous—they would only produce an uncomfortable burn of the mouth, throat, and stomach. A teaspoonful might be a serious dose for a one-year-old. Give bread or precooked cereal, and induce vomiting.

"Iron, quinine, and strychnine" tonic pills are a frequent cause of poisoning. Three pills would be dangerous for a one-year-old.

Kerosene. A tablespoonful is a dangerous dose for a one-year-old. Induce vomiting.

Luminal. See barbiturates.

Lye is dangerous in small amounts. Give as much grapefruit juice, or lemon juice (can be sweetened), or dilute vinegar (one part to 3 parts of water) as the child will drink. Induce vomiting and repeat. Same treatment for ammonia, washing soda, potash, caustic lime, quicklime, caustic soda, drain cleaners.

Lysol. See carbolic acid.

Matches of any kind and the place to strike them are no longer made of dangerous chemicals. (Don't let children eat them, however.)

Mercury in metal form from a broken thermometer is usually not very dangerous. Consult the doctor, however. For other forms of mercury see bichloride of mercury.

Mothballs. Induce vomiting.

Mushrooms and toadstools. Some of the nonedible varieties are poisonous. Induce vomiting.

Nicotine. One swallowed cigarette or a few drops of a plant spray containing nicotine are dangerous for a one-year-old. Induce vomiting immediately.

Nitric acid. Same treatment as hydrochloric acid.

Plant sprays are apt to contain nicotine or arsenic and are dangerous in small amounts. Induce vomiting.

Phenobarbital. See barbiturates.

Phenol. See carbolic acid.

Phosphorus. See rat and roach pastes.

Potash. See lye.

Quicklime. Same treatment as lye.

Rat poisons usually contain arsenic or phosphorus. An amount the size of a small pea may be dangerous to a one-year-old.

Roach pastes usually contain phosphorus. An amount the size of a small pea may be dangerous. Induce vomiting.

Roach powder may contain fluoride. A half teaspoonful may be dangerous for a one-year-old. Induce vomiting.

Shoe polish. Some black shoe polishes and dyes contain poisonous chemicals. Induce vomiting.

Sleeping medicines. Same treatment as barbiturates, which many of them contain.

Soda bicarbonate. Not serious.

Soda, caustic. Dangerous. Same treatment as for lye.

Soda, washing. Same treatment as for lye.

Strychnine. Two tablets prescribed for an adult may be dangerous for a one-year-old. Induce vomiting immediately with salt or mustard solution, and repeat.

Sulfuric acid. Treat as hydrochloric acid.

Turpentine oil. Induce vomiting.

Washing soda. Same treatment as lye.

Wintergreen oil. A teaspoonful is a dangerous dose for a one-year-old. Induce vomiting.

Special Problems

TRAVELING WITH A BABY

466. **Traveling with a baby.** If you are going to be traveling for less than 24 hours, you can prepare and refrigerate the required bottles ahead of time. Wrap the entire outer surface of the sterilizing pail, and line the lid inside with about 10 layers of newspaper, tied on with string, in such a way that you can remove the top without undoing it. When it's time to go, place the bottles in the bottle rack in the pail and pack in all the ice, in chunks or cubes, that the pail will hold (chipped ice will melt too fast). The milk will stay cold for many hours, depending on the temperature of the place where you keep it.

If you are only going to be traveling over 1 or 2 feedings and don't want to carry the heavy pail, wrap one or two bottles, well refrigerated, in 10 or 15 layers of newspaper.

If you are going to be traveling several days, it's more complicated. You should talk it over with the doctor, taking into

account the nature of the travel, the baby's diet and digestion. Call the airline or railroad to find what conveniences they can promise you, particularly in regard to preparing the formula. Under difficult circumstances, the easiest way is to shift the baby to an evaporated-milk formula about a week before starting, so that he will be used to it. Bring along a day's supply of empty sterilized bottles and nipples, as many 5-ounce cans of evaporated milk as the baby will need feedings on the whole trip, and a quart of sterilized water in a sterilized bottle (such as a vinegar or wine bottle). You will also need your funnel, measuring spoon, bottle and nipple brushes, can opener. An electric bottle warmer will be very handy.

You can make up each bottle as you need it. Put the correct amount of sterilized water into the bottle, add the sugar, dissolve, add the evaporated milk (having washed the top of the can), shake. Warm in the electric warmer, or the washstand, or in the diner if they'll accommodate you (a tip each time will help). Thoroughly wash the bottle, nipple, funnel, can opener, with soap and brush immediately after use and drain dry.

At the end of 24 hours you will have to have a quart of freshly sterilized water. This is most important. If they are willing, you would also like very much to sterilize the large water bottle, the nursing bottles, nipples, and funnel. (They will be more apt to accommodate you if you find the most convenient time for sterilizing.)

Powdered milk is also used in traveling. It is light to carry but is more difficult to mix than evaporated milk.

Most solid foods should be in cans, which can be warmed before opening and fed directly from the can. Don't worry about providing everything that the baby usually gets (potatoes, for example). Just bring enough of the things he likes best and digests most easily. Many babies do not want as much as they would be taking at home. Don't urge anything that he doesn't want, even if he is taking much less than usual. He may want to be fed small amounts at more frequent intervals.

It is worth while, with a baby, to travel by the best accommodations that you can afford. You will be able to get more service on a first-class ticket, and if you can afford it, you will

feel a lot more comfortable in a compartment, when the baby is fussing.

Disposable diapers will be a great help.

With a small child, don't forget to have handy the cuddly toys that he takes to bed. They will be an extra comfort in traveling. In addition to his favorite toys, it is well to bring a few new playthings of the kind that take a lot of doing: miniature cars or trains, a small doll with several articles of clothing or other equipment, a coloring or cutout book, cardboard houses or other objects to fold and assemble.

It's better to keep a small child from drinking train water (bring some in a thermos), eating unusual foods. When buying food for him in public places, avoid particularly cakes and pastries with moist fillings, milk puddings, cold meats, cold fish, and cold eggs (including sandwiches and salads that contain them). These are the foods that are most easily contaminated with poisonous bacteria if carelessly handled or not properly refrigerated. Better stick to hot foods, fruit that you peel yourself, milk in separate containers. (Of course, you can put up your own sandwiches at home, such as peanut butter, jelly, tomato, sliced chicken.)

THE PREMATURE BABY

A baby weighing less than 5½ pounds at birth requires special care, whether he was born early or not. He particularly needs a doctor's close supervision. If he weighs much under 5 pounds, he will probably be taken to a hospital, if that is possible, where an incubator and expert care are available.

The information in this chapter is given only to cover those emergency situations where a premature baby *has* to be cared for, temporarily, by the family until the doctor can be reached or the baby is taken to the hospital.

467. **Keep the baby warm from the beginning.** This is by far the most important emergency treatment for the family to attend to. A premature baby loses body heat rapidly when exposed to cool air, and his body's ability to make heat and to keep an even temperature is poor.

Wrap him in a warm, soft, wool baby blanket the minute he is born (even before the cord is cut) and keep him in a warm place. If he is born without a doctor's presence, the cord should

not be tied and cut until it stops beating. This is to make sure he receives all the blood available from the placenta.

468. **The room temperature should be 80 degrees day and night.** This means a very warm room. If the baby is born in a cool room, get him into the warmest room in the house as soon as the cord is cut. Then try to warm up one room to 80 degrees. Other things being equal, it is easier to keep a small room warm than a large one—if you will be using an electric or kerosene heater, for instance. If you have no special way to heat up a room, the kitchen may be best, temporarily.

469. **The air should be somewhat moist.** Except in summer, the air in a room that is 80 degrees will be exceedingly dry. If the baby is going to stay at home for more than a few hours, you should get extra moisture into the air by one of the methods described in Section 397. Pans of water placed in the room will not make enough difference.

It is not necessary or wise to keep the room steamy or dripping wet, as you try to do in the treatment of croup—only comfortably moist, so that it feels pleasant, unparched to breathe.

470. **Preparing the bed.** (How to keep the bed warm will be taken up in the next section. Be warming his mattress near a fire or on a radiator while you are preparing his bed. You will also be needing hot water for hot-water bottles, or warmed bricks or bags of sand, as soon as the bed is ready.)

His bed can be an ordinary bassinet, a wooden soapbox, or even a cardboard carton. A bureau drawer will be too shallow to keep the outer covering off his body. A crib will be too large to enclose and keep warm. If you have no baby's mattress, you can use a pile of folded newspapers topped with a folded pad or small blanket. It should not be too soft.

Here is one way to arrange the bed. Line it with an adult's heavy wool blanket. (A lining of 10 thicknesses of newspaper will do just as well, when you have the time. Line the bottom as well as the sides.)

Replace the mattress. Cover it with a piece of waterproof sheeting (or a few thicknesses of newspaper). This should be cut small or folded so that it doesn't have to be tucked in—you want to be able to change it easily without undoing the

whole bed. Use a folded diaper for a sheet—it shouldn't be tucked in, either.

Place the baby, still loosely wrapped in only the soft baby blanket, in the bed, on his back. Now an ordinary heavy wool adult's blanket (or 2 layers of lighter blankets) should be stretched over the top of the bed in such a way that it does not lie on the baby's body and does not cover his head. The edge of the blanket toward his head dips down to his neck (to close in his body and leave his head out).

471. Heating his bed. If a baby weighs 4½ pounds or more, and if his room can be kept at 80 degrees, his bed may not need to be heated additionally. But if he weighs less, or his room is cooler, it will probably be necessary.

The bed should be kept between 80 and 90 degrees—checked constantly with a thermometer (see Section 473). Experience will show what is the right bed temperature in order to keep the baby's body temperature between 97 and 99 degrees.

The easiest way to heat the bed, until the baby can be in an incubator, is with two or more ordinary rubber hot-water bottles tucked in along the edges of the mattress. If these are not available, you can use any kinds of bottles that can be well stoppered and that hold a pint or more; for example, quart vinegar, wine, or whisky bottles with tight corks or screw-on caps, or preserve jars with washers and screw-on or clamp-on tops. It is absolutely necessary to have bottles that cannot leak or become unstoppered by accident.

Bricks, bags of sand, or even small boulders can be heated in the oven to provide warmth.

Whatever heated objects are used should not be put into the baby's bed until they are cool enough to be able to be held in the bare hand. Even then they should be covered with cloth to prevent the baby's tender skin from being burned in case of accidental contact. One thickness of bath toweling or knitted blanket, or 2 layers of diaper, should be enough. (If the covering is too thick, it will prevent the heat from getting into the bed properly.) The blanket or gown that the baby is dressed in will be another protection. Even so, his body should not be up against the hot objects.

On the other hand, you can't be so worried about burning the baby that you use the hot-water bottles or bricks only barely warm. They must be hotter than the body to do any good. If you have a bath thermometer, use water at 115 degrees for hot-water bottles. This is about the hottest water most people can put their hands in.

One way to cover the hot-water bottles or bricks, and hold them in place, is with bath towels. Hang a bath towel over the side of the bed. The end which is inside is tucked well under the mattress. The other end hangs down outside the bassinet. Then there will be a pocket inside the bed, between the bath towel and the blanket lining the bassinet, which will hold the hot-water bottle in a fairly upright position. One large bath towel on each side of the bed may make a pocket large enough to hold two hot-water bottles on each side. A bottle can be removed without opening the bed by slipping the hand up under the loose edge of the bath towel.

How many bottles or bricks must be used and how often they must be changed will depend on several factors. You are trying to keep the bed temperature steady at a point that will keep the baby's body temperature between 97 and 99 degrees. If it varies more than this, you must change the bottles more frequently. If it tends to stay below 97 degrees, you must use more bottles or other warm objects. Start with two hot-water bottles for a trial.

You should change one object at a time, otherwise they will all be hot or cool at the same time. Remove a bottle or brick that has become lukewarm. If it is cooler than the baby's body, it will be cooling him and his bed. You'll probably have to change one every hour anyway.

472. **Taking the baby's temperature is very important.** Get a clinical thermometer as soon as you can. A rectal one with a round bulb is better, but you can use a mouth thermometer. Grease the bulb with petroleum jelly or cold cream. Expose the baby's anus by lifting up his legs, without moving him from the bed. Insert the thermometer gently, continue to hold his legs up, but cover over the top of the bed so that heat will not be lost while the temperature is being taken. Pull the thermometer out gently in a minute without opening up the bed.

How often you take the temperature at first depends on how successful you are in keeping his temperature between 97 and 99 degrees. Take it half an hour after birth and an hour after he has been put in the heated bed. If it is satisfactory, wait 2 hours the next time, 4 hours the next. When everything is well regulated, every 6 hours is often enough. But if you find his temperature under 97 degrees, add more heated objects and take his temperature every hour until it has stayed between 97 and 99 degrees for a couple of hours. If it is above 99, remove all the heated objects and take the temperature every hour until it is staying at the right level. Then lengthen the interval to 2, 4, and 6 hours.

It is important that the baby's temperature not go above 99 or stay below 97, but if you are having trouble keeping it between these levels, it's less dangerous to have it drop below 97 temporarily than to get it over 99. You don't want to take his temperature more often than you have to, because it will irritate his rectum.

Don't remove the baby from the heated bed. You change his special diaper and the sheet and waterproof sheeting under him, take his temperature, feed him, while he is in the heated bed. Don't open the top cover more often, or wider, or for longer than is absolutely necessary.

473. **One house thermometer is necessary.** It is better to use two, if you have them, or can borrow or buy them. You can use a house thermometer or an outdoor thermometer or a bath thermometer. One is to lay in the covered part of the bed beside the baby's body, the other is to hang in his room near the bed. If you have only one, lay it beside the baby's body most of the time, and take it out into the room occasionally for 20 minutes to check the room temperature.

It will be ideal if you can keep the bed temperature from varying more than 2 or 3 degrees. For a baby under 3 pounds it is usually necessary to keep the bed temperature up around 85 to 90 degrees. A larger baby may stay warm enough with a bed temperature between 80 and 85 degrees.

474. **Going to the hospital.** The doctor will decide whether the baby should be taken to the hospital. Of course, this de-

pends on the baby's size and condition, how well he can be cared for at home, the distance from the hospital.

If you are not able to get in touch with the doctor right away, don't take the baby to the hospital until you have arranged a heated bed that is working right, until the baby's temperature is being held between 97 and 99 degrees, and until you have a heated car (unless it is summer). It is much safer for the baby to stay warm at home for a few more hours than to get chilled on the way to even the best hospital in the world.

He should travel to the hospital in a heated bed. You will have to be extra careful, with the jouncing, that the hot-water bottles or warmed bricks are staying in position and that the baby does not lie against them.

If it's decided that it's better to take him to the hospital even if there is no heater in the car, warm the car first (for instance with a kerosene heater) and cover the head end of his bed with a knitted blanket. This will let in enough air for him to breathe but keep drafts out.

A premature baby is usually kept in the hospital until he weighs about 5½ pounds.

475. **Clothing and diapering the premature.** Since the premature baby will be in a warm room (80 degrees) and in a bed that is further warmed (between 80 and 90 degrees), it isn't necessary to bundle him up in a lot of clothes. You don't want to move him from his warmed bed to dress or diaper him, and you don't even want to open up the bed more than you have to. The simpler the clothing the easier it is to change.

At first just lay him (naked) in a very soft knitted wool baby blanket, folded so that there are two layers below and two above him. Later you can get or make soft wool flannel gowns that open down the back (no hurry about this). Instead of diapering you can lay a piece of absorbent cotton covered by a layer of gauze under his buttocks (inside the blanket or gown) to absorb urine and bowel movement, and throw it away when it is soiled. Or you can lay a folded diaper under his buttocks (in addition to the diaper used as a sheet). Don't pin a diaper between his legs until he weighs about 6 pounds.

476. **If the premature stays at home.** If the premature stays at home, it will be much better to secure an incubator, if pos-

sible. They may be borrowed from some state health departments.

If a regular incubator cannot be had and there is electricity in the home, someone may be able to build a peaked wooden hood to fit over the bed (instead of the blanket cover) to cover the baby's body up to his neck. An electric light bulb of 25 or 40 watts, protected by wire screen (so that there is no chance that the baby or the clothing will come in contact with it), fixed to the underside of the hood in its highest part will provide even heat. The head end of the hood, which is open, is fitted with a curtain of flannel which hangs down to the bed (and over the baby's neck) to keep the warm air in.

477. Daily care. Handle him little and don't remove him from the heated bed, except possibly to weigh him speedily every third day.

Clean him once a day with a little mineral or baby oil on absorbent cotton. Uncover only one part at a time. Work fast, starting with his cheeks, head, neck, and throw that piece of cotton away. Next arms, chest, and back (coming to the buttocks last) and throw away the cotton. Then legs, abdomen, genitals. You get to the diaper region last, front and back, so as not to spread bacteria over the body.

You daily change his waterproof sheeting and the diaper used as a sheet by lifting him up and slipping the used ones out and the fresh ones in.

After he has had a movement (of which there are often 6 a day) clean his buttocks gently, quickly, with oil on cotton.

After 2 or 3 days, when you have learned how to keep his body temperature level, you will only need to take his temperature twice a day.

By the time he is 1 or 2 weeks old, and if he weighs 4 pounds, you may not have to keep his bed temperature above 80 degrees. If you can keep the room at that temperature, you may be able to stop using heat in the bed itself. It all depends on what his body temperature does. By 5 pounds you can probably cut the room temperature to 75 degrees, and by 6 pounds to 70 degrees. Then you will be using regular baby clothes and bedclothes, and his blanket-lined and blanket-covered bed won't be necessary.

Since a premature baby catches skin infections, colds, diarrhoea easily and seriously, it is important that only one person take care of him, if possible, and that *no one else come into his room* until he weighs 6 or 7 pounds. If the person caring for him develops the slightest feeling of a cold, sore throat, or other illness, she should be replaced immediately, if possible.

If you have scales, weigh him twice a week. Weigh him quickly, wrapped in his baby blanket. Later weigh the blanket and anything else that was on him, and subtract from the total weight to get the baby's actual weight.

A small baby is slower to start gaining weight than a large one. A small premature may lose weight for a week and then pause for as long as another week before starting to gain. It may well take him 3 weeks to get back to birth weight. For a while he's apt to average between half an ounce and an ounce a day in gain. By the time he weighs 6 or 7 pounds, he'll probably be gaining 1 to 2 ounces a day.

478. **Feeding the premature baby when it is impossible to have a doctor's advice.** The feeding of a premature baby is a highly individual matter, which requires close supervision by the doctor. The following rough guide is only for the rare case where it is absolutely impossible to get a doctor's help.

The premature baby can take only small amounts at first, chokes easily, and yet, in most cases, needs a good intake of milk to gain weight. Until he weighs about 5 pounds, he is usually too weak to suck at a nipple so must be fed by medicine dropper. It is wise to slip a piece of small soft rubber tubing over the end of the dropper to prevent scratching of his mouth. The medicine dropper should be boiled each time before it is used again.

Breast milk is much safer and better, if it can be procured. The mother's breasts should be carefully emptied every 3 or 4 hours (Section 40). At feeding time the correct amount of breast milk can be poured from the bottle in which it has been kept in the icebox, into a sterilized cup.

If no milk has been secured by the third day it will probably be necessary to use an evaporated-milk formula until the breast milk comes in. Don't give up trying to get breast milk until the 10th day, anyway. Keep it up then if as much as half an ounce

is secured at a time—that will help even though it has to be combined with formula.

If you have to use formula use evaporated-milk formula #1 (Section 52), which provides 15 ounces. You won't need much of it at first with a small baby. Prepare it daily and bottle it in two sterilized bottles (7½ ounces each) and measure out the amount you require at each feeding (with a sterilized measuring teaspoon) until you are up to 1½ ounces, which is 9 teaspoonfuls. Throw away what you do not need at the end of 24 hours. Prop the baby's head and shoulders up with a small pillow at feeding time. For the first 2 or 3 days, particularly with a baby under 4 pounds, go *very* slowly in dropping the water or milk into his mouth. Put in only a couple of drops at a time, and wait until he swallows. Don't worry if each feeding takes the better part of an hour at first. As he gets more used to it, he will swallow sooner and you can go faster.

479. **Using the feeding chart (when it is impossible to have a doctor's advice).** The amounts given in the chart are meant to be only a very rough guide. One baby will want to increase faster than another, but don't increase too fast the first 2 or 3 days—that is the period when the baby is most likely to choke.

The chart shows increases of ½ teaspoonful or 1 teaspoonful from one day to another, but you should make these changes more gradual from one feeding to the next. For example, if you are going to increase from 2 teaspoonfuls to 3 teaspoonfuls over a 24-hour period, give 2¼ teaspoonfuls for a couple of feedings, then 2½ teaspoonfuls, next 2¾ teaspoonfuls, finally 3 teaspoonfuls. Don't increase faster than the baby can take it comfortably. It's better to be several days behind schedule than to get in trouble.

The bottom part of the chart does not list the days of the baby's age, since by this time one baby will be wanting an increase in 2 or 3 days, another not until 6 or 7 days.

How do you know when to increase? A premature baby is less likely to show his hunger by waking early and crying than the full-sized baby. But if he has been taking his last increase well for 2 or 3 days, it's a good time to increase again. If he stops gaining weight for several days, it may be a sign he needs an increase, provided he is willing to take more.

When your baby gets to the bottom of one column of the chart, go to the next column, 3 lines up. The bottom part of the last column (the 5-pound baby) changes from teaspoonfuls to ounces. At somewhere between 5 and 6 pounds the baby will be able to go for 4 hours at a stretch at night (3 hours still in the daytime), which will mean that the total formula is then divided into 7 bottles instead of 8. Now you can shift to the formula chart in Section 52.

Day of Life	About 2 pounds		About 3 pounds		About 4 pounds		About 5 pounds	
	MILK Breast or formula	WATER for between feedings	MILK Breast or formula	WATER for between feedings	MILK Breast or formula	WATER for between feedings	MILK Breast or formula	WATER for between feedings
	Teaspoonfuls each feeding		Teaspoonfuls each feeding		Teaspoonfuls each feeding		Teaspoonfuls each feeding	
1		½		½		1		1
2	½	1	1	1	1	2	2	2
3	1	1½	1½	2	2	3	3	4
4	1½	1½	2	2½	3	4	4	5
5	1½	2	2½	3	4	3	5	4
6	2	1½	3½	2	5	2	6	3
7	2½	1	4	1½	5	2	7	2
8	3	1	4½	1	6	1	8	1
9	3	1	5	1	7	0	9	0
10	3½	0	5½	0	7½	0	9½	0
Next increase (in 2 to 7 days)	4		6		8		OUNCES OF FORMULA	
Next increase (in 2 to 7 days)	4½		6½		8½		1¼ ounces in each of 8 bottles, *or* 2 ounces in 7 bottles	
Next increase (in 2 to 7 days)	5		7		9			
Next increase (in 2 to 7 days)	5½ The next increase, to 6 teaspoonfuls, is in the next column, 3 lines up.		7½ Next increase in next column, 3 lines up		9½ Next column, 2 lines up		2½ ounces in 7 bottles	

When he is over 5 pounds, it is time to try putting him to breast, or to try giving him his formula from the bottle. Use small nipples at first.

As you see from the chart, the baby is given boiled water midway between his milk feedings (from the medicine dropper), for his first 8 or 9 days, until he is taking enough milk to cover his fluid needs. Give the milk at 6 A.M., 9 A.M., 12 noon, 3 P.M., 6 P.M., 9 P.M., 12 midnight, 3 A.M. Give the water at 7:30 A.M., 10:30 A.M., 1:30 P.M., 4:30 P.M., 7:30 P.M., 10:30 P.M. Omit the water at 1:30 A.M. and 4:30 A.M.

With a baby weighing 4 pounds or more, you can start water 12 hours after he is born, and milk 24 hours after he is born. With a smaller baby, wait for 18 hours to start the water.

480. **Other needs of the premature baby.** He will need vitamin D in larger amounts than the full-term baby, and it should be started by the time he is a week old. A "concentrated" preparation should be used, not plain cod-liver oil. If you cannot get medical advice, give 15 drops of crystalline vitamin D daily, dissolved in his milk or, if he is on the breast later, in an ounce of water. Change to 20 drops of a "concentrated" fish-liver oil when he weighs 7 pounds (see Section 72).

He should start vitamin C pills by the time he is 2 weeks old. If you cannot get medical advice, give a 50 milligram tablet daily (see Section 74).

By the age of a month he may be needing an iron prescription to prevent anemia.

He will have to wait until a later age than the full-term baby to have cool air in his room and to go outdoors, but you can follow the guide in Section 84, which is based on weight.

Most premature babies develop quite normally when allowance is made for their prematurity. They usually gain and grow more rapidly for a while to make up for the slow gaining at first. Naturally, they cannot make up for their youngness. The baby who was born 2 months early and has become "one year old" should be thought of as really a 10-month-old.

Once the premature baby has gone through the hazards of the early weeks and reached the safe weight of 7 or 8 pounds, his main danger is that his parents will keep on worrying about him and overprotecting him. He needs the sensible care and protection that any baby does. But too much concern, too little easygoing, comfortable acceptance will cramp his personality just as it will hurt any child.

TWINS

481. A mother needs help. Twins are fun but hard work, especially during the first year. What with feeding and bubbling and diapering and bathing and doing the laundry, a mother's day can be completely taken up before she even gets around to the rest of the housework or her own meals. Since twins are usually small to start with, it may mean a 3-hour schedule by day at first, and 2 A.M. bottles for a longer than average time.

The mother of twins should make every effort and spare no expense to get someone to help her, at least until she has regained her strength and learned how to do things efficiently. She ought to go on having help, even if she has to borrow to do it, until she finds she can do the whole job without becoming too tired. This is not an extravagance but insurance against becoming physically and nervously exhausted. She should certainly get diaper service if she can. She will have to learn to cut corners. It may be necessary, if she has no help, to prop the bottle on a folded diaper so that one baby can feed himself while the other is being held, alternating babies each feeding. Naturally it's good to cuddle a baby for every feeding if possible, but it's better to skimp a little here than to wear the mother out.

The question of breast feeding depends on the situation. It isn't often that the mother can provide enough for both twins. If the doctor feels that the smaller baby needs the breast milk, he should get it, pumped or expressed by hand, and fed from a bottle if he's too weak to take it from the breast. If manual expression doesn't keep the breast supply going, it may be better to let the stronger baby do the nursing. If breast feeding doesn't supply enough for even one baby, it's usually better to stop it altogether, because it uses up so much time in addition to bottles. Twins born early need extra vitamin D and perhaps iron, like premature babies (Section 480).

482. Let them be individuals. The temptation is strong to dress twins exactly the same, treat them the same, always refer to them as "the twins," and constantly compare them in conversation. This is fun, but it isn't fair. It must be unsatisfac-

tory to grow up not being considered a separate individual but as half of a pair. Thoughtless outsiders will probably go on, anyway, making jokes about them, comparing them, asking them, if they look alike, how to tell them apart. At least the family should give each one a chance to be himself, to be known by his own name, find his own friends, develop his own interests, be encouraged to wear different clothes if he wants. Most important of all is that they not be compared with each other in beauty or brains or anything else. Even "identical" twins are apt to start at different sizes and grow at different rates. Efforts to make the smaller catch up by "feeding him up" are more apt to take his appetite away and slow him down. Enjoy each one for what he is and he'll grow up at peace with himself, his twin, and the rest of the world.

SEPARATED PARENTS

483. Is separation necessary? Parents who are considering separation sometimes ask a doctor whether it is better for the children to have the parents separate for the sake of peace, or to hold the family together in spite of friction. Of course there is no general answer to this. It all depends on why the parents don't get along and the chances of their working out their differences.

It's usually true that when a couple is disagreeing, each one feels that the other is mostly to blame. Yet an outsider can often see that the trouble is not that one or the other is a villain but that neither seems to realize how he or she is acting. In one case, each spouse unconsciously wants to be pampered by the other like an adored child, instead of being willing to contribute his or her share in a partnership. In another case, a bossy spouse has no idea how much he or she is trying to dominate the other; and the one who is being nagged may be asking for it. Very often in the case of unfaithfulness the faithless one is not really falling in love with an outsider but, rather, running away from a hidden fear or unconsciously trying to make the spouse jealous. If husband, wife, or both are willing to make a real effort to save the marriage, a good psychiatrist (or a wise and tolerant minister) should be able to help them to analyze where the troubles lie.

484. **Let the child stay loyal to both.** How much of a handicap a separation will be to the child's security depends very largely on how the whole matter is handled. The children should certainly be told soon after the parents have made their decision. Children are always disturbed by a family crisis anyway, and more so if it is kept a mystery. The important things to let the children understand are: 1. Even though the parents separate, the children will still belong to both and will always be able to see both regularly. 2. That neither parent is the good one or the bad one. This is the hardest rule for the parents to abide by. It is only human for each to feel that the other is at fault and to want to get the children to agree with him. It's terrible for a child to become convinced that one of his parents is bad. The child of a divided home needs to believe in both of his parents just as much as the child of a happy family. But there is another danger, even for the parent who has won the child over to taking his side. When the child reaches a later stage of development, most often in adolescence, when his feelings towards the people who are close to him are going through all kinds of upheavals, he may suddenly turn against the parent he has been loyal to all along and switch sides completely. In other words, each parent has a better chance of keeping a child's love and respect if the child is never encouraged to take sides.

In what words can you explain the separation to a child? It depends on the age of the child and what he wants to know. The mother of a small child might say, "Your Daddy and I argue and fight too much, just the way you and Peter Jenkins do. So we've decided that we'll all have a better time if we don't try to live in the same house. But Daddy will still be your Daddy and I'll still be your Mummy." This is explaining it at the level of the small child who knows well what arguing and fighting are. The older child will want to see the reasons a little more clearly than this. I would try to give him answers that satisfy him, but steer away from pinning the blame.

485. **Arguments aren't shameful.** Parents who are disagreeing often make a great point of trying to conceal their arguments from their children and even imagine that they don't suspect that anything is up. It is certainly better to carry on

heated fights when the children are out of the way, but it's a mistake to think that they aren't aware of family tensions. When a child stumbles in unexpectedly on a scene, I think it's much better for the parents to admit humanly that they have been having an argument, than to suddenly become silent and severe and order the child out of the room. It helps to clear the air for everyone to admit that fights are one of the facts of life, even among grownups, that people can fight at times and still love and respect each other, that a fight doesn't mean the end of the world.

486. Living arrangements for the child's benefit. What arrangements are made for the children's spending time with each parent will depend on circumstances. If the parents live within a reasonable distance of each other, and if the children spend most of the time with their mother, the best arrangement may be to have them visit their father on week ends and during those vacations which he can share with them. Whether the visits occur once a week or once a year, it's better for them to be regular, and for the father not to miss or postpone them.

An arrangement where the children stay 6 months of the year with one parent and then 6 months with the other usually works out badly. It breaks up their schooling, separates them for too long a time from the other parent, and gives them a feeling that their lives are chopped in two in a very arbitrary way.

It's a mistake for either parent to pump the child about what happened while he was visiting, or to criticize the other parent. This only makes the child uneasy when he's with either parent. In the end it may backfire and make him resent the suspicious parent.

In all cases, but especially those where the parents can't agree on a reasonable sharing of the child, or when he himself dislikes visiting one of them, it is better for the parents to consult a children's psychiatrist (Section 338) about what will work out best for the child, instead of fighting for his custody, like dogs fighting for a bone.

THE WORKING MOTHER

487. To work or not to work? Some mothers *have* to work to make a living. Usually their children turn out all right, be-

cause some reasonably good arrangement is made for their care. But others grow up neglected and maladjusted. It would save money in the end if the government paid a comfortable allowance to all mothers (of young children) who would otherwise be compelled to work. You can think of it this way: useful, well-adjusted citizens are the most valuable possessions a country has, and good mother care during early childrood is the surest way to produce them. It doesn't make sense to let mothers go to work making dresses in factories or tapping typewriters in offices, and have them pay other people to do a poorer job of bringing up their children.

A few mothers, particularly those with professional training, feel that they must work because they wouldn't be happy otherwise. I wouldn't disagree if a mother felt strongly about it, provided she had an ideal arrangement for her children's care. After all, an unhappy mother can't bring up very happy children.

What about the mothers who don't absolutely have to work but would prefer to, either to supplement the family income, or because they think they will be more satisfied themselves and therefore get along better at home? That's harder to answer.

The important thing for a mother to realize is that the younger the child the more necessary it is for him to have a steady, loving person taking care of him. In most cases, the mother is the best one to give him this feeling of "belonging," safely and surely. She doesn't quit on the job, she doesn't turn against him, she isn't indifferent to him, she takes care of him always in the same familiar house. If a mother realizes clearly how vital this kind of care is to a small child, it may make it easier for her to decide that the extra money she might earn, or the satisfaction she might receive from an outside job, is not so important after all.

488. **What children need most from parents or substitutes.** The things that are most vital in the care of a child are a little bit different at different age periods. During the first year, a baby needs a *lot* of motherly care. He has to be fed everything he eats, he eats often, and his food is usually different from the adults'. He makes a great deal of laundry work. In cities he usu-

ally has to be pushed in his carriage for outings. For his spirit to grow normally he needs someone to dote on him, to think he's the most wonderful baby in the world, to make noises and baby talk at him, to hug him and smile at him, to keep him company during wakeful periods.

The average day nursery or "baby farm" is no good for him. There's nowhere near enough attention or affection to go around. In many cases, what care there is, is matter-of-fact or mechanical rather than warmhearted. Besides, there's too much risk of epidemics of colds and diarrhoea.

The infant whose mother can't take care of him during the daytime needs *individual care*, whether it's in his own home or someone else's. It may be a relative, neighbor, or friend whom the mother knows and has confidence in. If a new maid or nurse is to come into the home, the mother should know her well before she leaves the baby in her care. Or the mother may decide to leave him in a foster home for "foster day care," that is to say, in the care of a woman who makes a profession of caring for children. But the foster mother should be doing it more because she loves children than for the income it brings. The only safe way to choose a foster home is through a first-rate, conscientious child-placing agency, that investigates and supervises the individual homes it recommends. But whoever the mother chooses should be a woman who is gentle and loving, and who is not trying to take care of more than two or, at the very most, three babies or small children.

Between the ages of 1 and 3, the care of a child requires a little less time but a lot more understanding. It's good for him to have other children around. He's a person now, with ideas of his own, needs more and more opportunity to be independent, has to be steered tactfully. An adult who is too bossy will make him balky and frantic. One who lacks self-confidence may be helpless to control him. One who smothers him with too much attention will hamper his development. Furthermore, this is the age when he comes to depend for security on one or two familiar, devoted people, and is upset if they disappear or keep changing. This is the least advisable period for the mother who has always taken care of him to go off to work for the first time, or to make changes in the person who takes her place.

The usual type of day nursery will not have enough nurses or attendants to give each child the feeling of really belonging to someone. And they will not have had the expert training in understanding small children to be able to foster their fullest development spiritually, socially, and physically.

So, if you have to go off to work when your baby is about a year old, the best solution will be individual care, just as it is for the younger infant. But for this age it is particularly important to find a person who has the ability to understand a child, get along with him easily, and who is not likely to quit the job in a few months.

How to get a small child used to a new grownup is discussed in Section 287.

A good nursery school (Section 294), staffed by trained teachers, may become the best solution somewhere between 2 and 3 years of age. If a first-rate school is available, and the mother can take over for part of the afternoon, I would be inclined to start the child at 2, especially if individual care had not worked out well, or if the child had had no chance to play with other children. It might be better to wait until 2½ or even 3, in the case of an extremely timid, dependent child (though he should be getting used to other children in the meantime) or in case his mother's working hours would mean his staying in school all day long.

But if there is no good nursery school, if the individual care is satisfactory, if the child is having a chance to play with other children anyway, then there is every reason to continue with individual care right up until he starts first grade. If I had to choose between an individual who seemed to make my child feel secure, and a *fairly* good nursery school or day nursery I would stick to the individual, certainly till the age of 3, and probably until 5 or 6.

If you live in a city, get the help of a child-guidance clinic, or of the best child-care agency or family agency in town, in deciding about nursery schools or foster day care. Even the best of nursery schools is apt to have two disadvantages for the working mother. The school day may not last until she can take over, and there is the problem of who is to take care of the child when he is sick.

Whatever the age of the child, it will be much better for him and for his mother if she can possibly find a job that leaves her part of the afternoon (or any other part of the day) to be with him.

Between 3 and 6 a child still needs plenty of affectionate, understanding care from adults. If his mother is working most of the day and he goes to a nursery school, he must feel he belongs to his teacher, too. This is why she ought not to be taking care of more than eight or ten children. However, at this age he is able to adjust to a teacher, and get a sense of security from her, more easily and completely than at 2. He still should find someone dear to him when he comes home from school, whether at noon, 3, or 6 P.M.

After 6 years, and particularly after 8, the child's nature seeks and enjoys independence, turns more to outside adults (especially to good teachers) and children for his ideals and companionship. He can get along comfortably for hours at a time without having to turn to a close adult for support. After school he still ought to have a feeling he belongs somewhere, even if he forgets to go there. A motherly neighbor may be able to substitute for a working mother until the latter comes home. Afterschool play centers are valuable for all children, but particularly for those whose mothers work.

A working mother may find that because she is starved for her child's company (and perhaps because she feels guilty about seeing him so little), she is inclined to shower him with presents and treats, bow to all his wishes regardless of her own, and generally let him get away with murder. When a child finds that his mother is an appeaser, it doesn't satisfy him—it's apt to make him more greedy. It's fine for a working mother to show her child as much agreeableness and affection as comes naturally, but she should feel free to stop when she's tired, consider her own desires, spend only what money is sensible, expect reasonable politeness and consideration—in other words, act like a self-confident, all-day parent. He will not only turn out better, he'll enjoy her company more.

489. What to look for in a nurse or foster mother. It's easy to make a list of all the virtues you would like the person who is to take care of your child to have. But when it comes down

to choosing between the actual human beings available, you have to decide which qualities are more valuable.

Far and away the most important is the woman's disposition. Toward the child she should be affectionate, understanding, comfortable, sensible, self-confident. She should love and enjoy him without smothering him with attention. She should be able to control him without nagging or severity. In other words, she should get along with him happily. It is a help when interviewing a prospective maid, nurse, or foster mother to have your child with you. You can tell how she responds to a child better by her actions than by what she says of herself. Avoid the person who is cross, reproving, fussy, humorless, or full of theories.

I think the commonest mistake that parents make is to look first of all for a person with a lot of experience. It's natural that they should feel more comfortable leaving a child with someone who knows what to do for the colic or the croup. But illnesses and accidents are a very small part of a child's life. It's the minutes and hours of every day that count. Experience is fine when it's combined with the right personality. With the wrong personality it's hardly worth anything.

Cleanliness and carefulness are a little more important than experience. You can't let someone make the baby's formula who refuses to do it correctly. Still, there are many rather untidy people who are careful when it's important. Better a nurse who is too casual than too fussy. One who can keep a child clean is a poor nurse.

Some parents feel that the education of a nurse or foster mother will have an influence on the child, but I think it's unimportant compared with other qualities, especially for a young child. Even if he learns to say "ain't," he'll surely drop it later if it's not used by his parents and friends.

A nurse or maid who has to have several nights off a week for social life may be a more balanced person and a better nurse than the one who has no interests but the child. However, the fact that a woman is an old maid doesn't prove that she can't be a wonderful, sensible nurse.

A common problem is that a nurse or maid may favor the youngest child in the family, especially one who was born after she joined the household. She calls him *her* baby. If this is a

joke and she really is just as devoted to the older children, and they know it, there's no harm. But if the older children feel discriminated against, and show it in their spirits, it's a bad business and she should not stay. It does irreparable harm to leave a child in the care of a person who does not give him security.

THE FATHERLESS CHILD

490. **When the father's away.** If a father is far away when his baby is born and growing up, it doesn't mean he can't have a feeling of taking part in the baby's care, or that the child will be seriously deprived. Far from it. The father needs lots of news and pictures. When a mother is writing, she's apt to think of the facts that are important to her: The baby is healthy, he's gaining weight at a good rate, he has two teeth, the doctor says he's normal—in fact, very advanced. The father wants to know these things, but even more he wants to know the little details that the mother takes for granted. Tell him how loud the bubble burp is and how dignified the baby looks when he lets it out. Jot down all the things he does for ten minutes: how he scrambles for a magazine, settles back on his behind, tastes the cover, puckers his face and shudders at the bitter taste, leans way forward to gaze at a picture as if he recognized something, tears it apart, rubs the shreds in his hair, crawls off with a piece in his hand, stops at the radio to bat it solemnly. You'll be amazed at how much there is to tell, and the father will grin all over when he pictures it. With a little practice you can remember some of a small child's remarks word for word until you get a chance to write them down. The most skilled author can't make up a child's conversation that's half as amusing or heart-warming as what any small child says any old time.

Take as many snapshots as you can, and send along any that don't look like midnight. A proud mother feels like holding back on the pictures that make the baby or her look homely or silly or cross. But a father trying to imagine his family doesn't want all smiling faces any more than a hungry man wants all candy. Keep sending a few pictures regularly, rather than a big bunch infrequently.

There's another point that's a little more serious and important. A father (like a mother) wants to feel that he's necessary

and that he's helping. If the mother, to keep him from worrying, tells him only about how easily she has settled all the questions that have come up, and how she has everything under control, he can't help feeling unnecessary. On the other hand, it won't help him to hear all the mother's secret worries about the baby that he can't do anything about. But there are always plenty of reasonable questions in a mother's mind: Should she spend the money to take him to the country on a holiday? Should he go to nursery school next fall? Should he be allowed to tear his clothes and endanger his limbs by climbing trees? These are questions that a father would naturally help to decide if he were at home. He may see them from new, helpful angles that haven't occurred to the mother, and it will give him a real sense of closeness if he is given a chance to share in deciding them.

A mother may feel that she's having a hard enough time as it is, making wise decisions—that it would only complicate matters to get opinions from her husband. But for better or worse, the bringing up of a child has to be shared by both parents in the long run. If a father, during a long absence, comes to feel that the mother is getting off the beam, that there is a lot he will have to undo when he gets home, it will complicate things for a long time after he arrives. It *sometimes* works out better in the long run if the mother (or father) agrees to a decision which she doesn't think is the right one in itself.

491. **Making it up to the child.** It would be foolish to say that his father's absence or death makes no difference to a child, or that it's easy for a mother to make it up to him in other ways. But if the job is well handled, the child, either boy or girl, can continue to grow up normal and well adjusted.

The mother's spirit is most important. She may feel lonely or anxious or cross at times, and she will sometimes take it out on the child. This is all natural and won't hurt him too much. The important thing is for her to go on being a normal human being, keeping up her friendships, her recreations, her outside activities as far as she can. This will be hard if she has a baby or child to take care of and no one to help her. But she can ask people in, and take the baby to a friend's house for an evening, if he can adjust to sleeping in strange places. It's more valuable to

him to have his mother stay cheerful and outgoing than to have his routine stay perfect. It won't do him any good to have her wrap *all* her activity and thoughts and affection around him.

A child, whether he's young or old, boy or girl, needs to be friendly with other men if the father is not there. With the baby up to the age of a year or two, a good deal is accomplished if he can just be reminded frequently that there *are* such creatures as agreeable men, with lower voices, different clothes, and different manners than women. A kindly grocer or milkman who just grins and says hello will help even if there are no closer friends. As the child goes on toward 3 and over, the kind of companionship with men is increasingly important. Whether he is boy or girl, he needs chances to be with and feel close to other men and older boys. Grandfathers, uncles, cousins, scoutmasters, men teachers at school, the minister, old family friends, or a combination of these can serve as substitute fathers, if they enjoy the child's company and see him fairly regularly. Any child of 3 or over will build up an image of his father which will be his ideal and inspiration, whether he remembers him or not. The other friendly men that he sees and plays with will give substance to the image, will influence his conception of his father, will make his father mean more to him. The mother can help by being extra hospitable to male relatives, sending her son or daughter to a camp which has some men councilors, picking a school, if she has a choice, which has some men teachers, encouraging a child to join clubs and other organizations that have men leaders.

The boy without a father particularly needs opportunity and encouragement to play with other boys, every day if possible, by the age of 2, and to be mainly occupied with boyish pursuits. The temptation of the mother who has no other equally strong ties is to make him her closest spiritual companion, getting him interested in clothes and interior decoration, in her opinions and feelings about people, in the books and other recreations she enjoys. If she succeeds in making her world more appealing to him, easier to get along in, than the world of boys (where he has to make his own way), then he may grow up precocious and effeminate. It's all to the good if a mother can spend lots of time and have plenty of fun with her boy, provided she lets

him go his own way or shares in his interests, rather than have him share too many of hers. It helps to invite other boys to the house regularly and to take them along on treats and trips.

THE HANDICAPPED CHILD

492. **Treat him naturally.** A child with a handicap may need treatment of the defect. But even more he needs to be treated naturally, whether the handicap is mental slowness, crossed eyes, epilepsy, deafness, shortness, a disfiguring birthmark, or a deformity of any other part of the body. This is easier said than done. A defect quite naturally upsets the parents to some degree. Here are examples of different reactions they may have.

493. **His happiness depends on his attitude, not on his defect.** A boy has been born with only a thumb and one finger on his left hand. At 2½ years he is happy, and can do almost as much with his left hand as with his right. His 6-year-old sister is fond and proud of him, wants to take him with her everywhere she goes, never seems to worry about his hand. The mother, however, is very conscious of the missing fingers. She winces when she sees a strange child catch sight of his hand and stare. She thinks it is fairer to the child to keep him at home where he won't be subjected to curiosity and remarks, makes excuses when he wants to go shopping with her. Which attitude is better for him, the mother's or the sister's? We first have to answer another question. Does a defect in itself make a child seriously self-conscious and ashamed? Generally speaking, no.

Of course, all of us are slightly self-conscious, and we all focus on what we think are our weakest features. Those with defects will naturally worry about them some. But anybody who has known many cripples, for example, will realize that some of those with the worst handicaps are just as outgoing, happy, and unworried as anyone with sound limbs. And at the other extreme you can probably think of one acquaintance who is miserably self-conscious, for instance, about the prominence of her ears, when actually they are not noticeable at all.

In other words, the seriousness of a defect has little to do with whether a person grows up feeling self-conscious, ashamed, unhappy.

The important factors that make a person (*with or without*

defects) grow up happy and outgoing are: having parents who thoroughly enjoy and approve of him, who do little worrying, urging, fussing, criticizing; having opportunities to learn the fun of "give and take" with other children from an early age. If the parents from the beginning are unhappy or ashamed about a child's appearance, always wishing he were different, overprotecting him, keeping him from mingling with others, he is apt to grow up turned in on himself, dissatisfied, feeling that he is queer. But if they take his disfiguring birthmark or a deformed ear as of no great importance, act as if they consider him a normal child, let him go places like anyone else, not worry about stares and whispered remarks—then the child gets the idea he is a regular guy and thinks little of his peculiarity.

As for the stares and pointing and whispered remarks, the child with a noticeable defect has to get used to them, and the younger the easier. If he is hidden most of the week and gets one stare on Sunday, it is more disturbing than ten stares every day, because he is not accustomed to them.

494. **He'll be happier without pity.** A 6-year-old boy has a birthmark that covers half his face. His mother has taken this hard and felt a lot of pity for him. She is strict with her two older daughters but excuses the boy from household tasks, lets him get away with rudeness to her and meanness to his sisters. He's not too popular with his sisters or other children.

It's understandable why parents of a handicapped child are inclined to feel too sorry for him for his own good, and to expect too little of him. Pity is like a drug. Even if it's distasteful to a person at first, he's likely to come to depend on it. Naturally, a child with a defect needs understanding, and he often needs special handling. The slow child should never be expected to do a job which is beyond his mental development, and one with stiff hands shouldn't be criticized for poor penmanship. But the child with a defect can be reasonably polite, take turns, do his share of the chores. Everyone is happier and more pleasant when he knows he's expected to be considerate. The child with a handicap wants, in the beginning, to be treated the same, held to the same rules as other children.

495. **Fairness to the whole family.** A 4-year-old child has been found to be very slow in his mental and physical develop-

ment. The parents have taken him from doctor to doctor and clinic to clinic. Each time they hear the same story. It is not a type of mental defect for which there is any curative treatment, though there are many things to be done to bring him up happy and useful. The parents want more than this, and they end up traveling long distances and paying exorbitant fees to a quack who promises a magical cure. As a result, the other children in the family receive less than their share of attention. The parents, however, feel much happier spending the money and making the effort.

It certainly is natural for parents to want to do whatever has a reasonable chance of helping a child with a handicap. But there's another hidden factor. It's human nature for them to feel, underneath, that they are somehow to blame—even though all the doctors and books explain that the condition is a pure accident of nature.

This unreasonable sense of guilt often drives them, especially if they are very conscientious people, to *do something* even if it's not sensible. It's a kind of penance, though they don't think of it that way.

If parents are on the lookout for this tendency, they will be better able to choose the right treatment for the child and, incidentally, spare their other children (and themselves) unnecessary deprivation.

496. **Brothers and sisters take their attitude from the parents.** A child, now 7 years old, has been born with "cerebral palsy." His intelligence has not been affected at all, but his speech is hard to understand, and his face and limbs are constantly making strange contortions over which he has little control.

His mother has a sensible attitude toward his handicaps. She treats him the same as her younger boy, except that she takes him several times a week to a special clinic where he receives massage, exercises, training in control of his limbs and speech. His younger brother and the children in the neighborhood are all devoted to him because of his friendly nature and enthusiasm. He gets in all their games and, though he often can't keep up, they make allowances. He goes to the regular neighborhood school. He is naturally handicapped in some

ways, but since the program is flexible and the children take a large part in planning and working out their projects, his good ideas and co-operative spirit make him a popular member of the class. His father, who is more of a worrier, thinks the boy might be happier in the long run if he were sent away to a special boarding school, among others with similar handicaps. He also fears that when the younger boy grows older, he will be embarrassed by the other's peculiar appearance.

If the parents accept a handicapped child wholeheartedly and matter-of-factly, the brothers and sisters will be apt to also. They will not be too upset by the remarks of other children. But if the parents feel embarrassed and tend to conceal him, he will be on the minds of the brothers and sisters just as much as if he were in sight.

497. **Where to live, where to go to school, where to get special training.** Suppose a child has a defect which does not interfere with his getting to the regular neighborhood school, and which does not handicap him in learning in a regular class. Examples would be minor crippling, healed heart disease that does not seriously limit a child's activity, peculiarities of appearance such as birthmarks. It's best for such a child to go to the regular neighborhood school. He will be living the rest of his life among normal people, and it's best for him to start out that way.

On the other hand, a child who is blind or seriously deaf, or one who is so slow mentally that he cannot keep up with the regular class, needs to attend a special class, not only to be able to learn generally, but to gain the special skills which he requires to make the best of his handicap and prepare himself to earn a living later. Some children with cerebral palsy and certain cases of infantile paralysis require, not special classes, but highly skilled muscle treatment and training that is available in only a few places. It is certainly preferable that the child who needs special schooling or treatments live at home if possible. The younger a child is (especially up to the age of 8), the more he needs the close, loving, understanding kind of care, the sense of really belonging, that he is more likely to get at home than in even the best of boarding schools. It is sometimes

possible for the family to move to a place where excellent special training can be secured.

If a young child must leave his family to get vitally necessary training or treatment, then the parents' main job is to visit and investigate the best boarding schools that are available. Whether the institution is using the most up-to-date special methods is only half the answer. Just as important is the spirit of the place—for children of all ages, but particularly for those under 8. Are the teachers and housemothers friendly, understanding, cheerful, able to control the pupils without severity? Are the classes for those under 6 years small and informal?

The most frequent mistake made by parents of deaf, blind, palsied, and other seriously handicapped children is that they spend precious years going from doctor to doctor, and then from quack to quack, hunting for a magic cure that doesn't exist, instead of starting the valuable special training that will really help the child if it is begun soon enough.

The child who is born very deaf, or who becomes that way early in life from illness, will learn to speak only with special help. Methods have been worked out, using sight, touch, and electrical amplification of sound, to teach him how to read lips and to speak. Then he can converse with everybody (instead of being limited, as the deaf used to be, to those who could use the sign language). A seriously deaf child will have to go to a special school for this training, and in general such schools exist only in the larger cities. It is important for him to start *between the ages of 2 and 3*, if he can live near such a school. If not, he should be in a special boarding school by the age of 4, but one that understands and provides for the special emotional needs of the young child. The Volta Bureau, 1537 35th St., N. W., Washington, D. C., will supply information on special schools for the deaf.

Information about classes, schools, and other facilities for crippled children can be secured from your State Department of Health, Division of Crippled Children. The very special training that is needed for children with cerebral palsy cannot yet be secured in every part of the country. You can consult the National Society for Crippled Children and Adults, Elyria, Ohio.

Parents of a blind child often postpone starting him in school for fear that he is too helpless to be on his own. But he needs early special schooling and training even more than the child who can see. Information about special classes and schools for blind children can be secured from your State Board of Education, or State Commission for the Blind.

498. **Love him for himself.** A certain child at the age of 10 is distinctly shorter than average, even shorter than his 8-year-old sister. The parents feel that this is a real tragedy, keep taking him to new doctors, all of whom have agreed that there is no deficiency disease—he is merely a child who seems to have been born with a small pattern. The parents show their concern in other ways, too. They frequently urge him to eat more so that he will grow faster. When there is any allusion to his size compared to his sister or to other boys, they eagerly remind him how much smarter or stronger he is in other ways.

There is enough rivalry among boys so that an individual who is short will feel some disappointment anyway. But the two factors that make the biggest difference are: the boy's general happiness and self-confidence, and how easily the parents accept his shortness.

Being told to eat reminds him of how worried his parents are and is more likely to take his appetite away than to improve it. Being compared favorably with his sister and friends in other qualities doesn't make him feel better about being short, and it only emphasizes the idea of competition and rivalry. There are times when the parents sense that a short child, or a homely one, or a nearsighted one wants to be told how unimportant his handicap is. Confident reassurance is then a great help. But if the parents are the uneasy ones, always bringing up the subject, it convinces the child that he must be in a bad way.

499. **Steady medical care.** The parents of a child with any defect should of course get expert advice, from a private doctor or from a good hospital clinic. And if they don't feel completely satisfied, or if the suggested treatment sounds drastic, they are certainly entitled to seek further consultation. Occasionally parents who have received what sounds like good advice from one doctor will consult one or two more, "just to be sure," but they are apt to be confused by minor differences in

treatment or terminology, and end up with more doubts than they started with.

If you have found a skillful doctor who understands your child's problem, stay with him, consult him regularly. The doctor who has known the child and family over a period of time is in a better position to prescribe wisely than the doctor who has just been called in. Psychologically, it is apt to be upsetting to the child with a defect to be taken to one new doctor after another. If you read of a new discovery in the condition your child has, ask your own doctor about it, rather than rush to the discoverer. If it has been proved to be beneficial, your own doctor will know or can find out whether it has any promise in your child's case.

500. Mental slowness. You can roughly divide cases of real mental slowness into three groups: organic, glandular, and "natural." Organic cases are those in which there is physical brain damage, caused, for example, by injury at birth or by encephalitis. Glandular cases are due to deficient functioning of the thyroid gland; if they are diagnosed early and treated correctly, the mental deficiency can be kept to a minimum.

The majority of cases of mental slowness are "natural," in the sense that they are not caused by disease or injury or by anything that the parents did wrong or failed to do right. The child merely starts out from conception destined to have less than the average degree of intelligence, just the way other children are born to be brighter, shorter, or taller than average. His intelligence continues to develop steadily, but at a slower rate than average. If a particular child at the age of 4 years has the intelligence of the average 3-year-old, then at age 16 he will probably have the intelligence of an average 12-year-old. He would be said to have an intelligence quotient ("I.Q.") of 75 ($3/4 = 12/16 = 75/100$). Though there is lots to be done for the naturally slow child, there is no cure, any more than there is a cure for blue eyes or large feet.

501. Being accepted enables him to make the most of his abilities. The troubles and behavior problems that some slow children develop are usually not due to low intelligence but to wrong methods of handling. If the parents feel that the child is queer or shameful, for instance, their love may not go out to

him in sufficiently full measure to give him security and happiness. If they mistakenly believe that they are to blame for his condition, they may insist on unwise "treatment" of all kinds that disturb him without benefiting him. If they jump to the conclusion that he is a hopeless case who will never be "normal," they may neglect to provide him with the playthings, the companions, the proper schooling which are needed by *all* children to bring out their best abilities. The greatest danger of all is that the parents, trying to ignore the signs that he is slow, trying to prove to themselves and the world that he is just as bright as the next child, will push him all along the line—try to teach him skills and manners before he is ready, hurry his toilet training, get him into a school class that he isn't up to, coach him at home in his lessons. The constant pressure makes him balky and irritable. Being frequently in situations where he can't possibly succeed robs him of self-confidence.

Sadly enough, the slow child whose parents have had only an average amount of schooling and are living happily on a modest scale often makes out better than the child who is born into a college-educated family or one that has high ambitions for worldly success. The latter are more likely to assume that it's vital to get good marks at school, to go to college, to go into a profession.

There are many useful and dignified jobs that are best performed by people who have less than average intelligence. It's the right of every individual to grow up well enough adjusted and well enough trained to be able to handle the best job that he has the intelligence for.

The slow child must be allowed to develop at his own pattern, to have eating habits, toilet habits, that are suitable for his stage of mental growth rather than suitable for his age. He needs opportunities to dig and climb and build and make-believe at the periods when he is ready for these activities, playthings that appeal to him, chances to play with children that he can enjoy and keep up with (even if they are a year or more younger in age). When he goes to school, he must only go into a class where he can feel that he belongs and is accomplishing something. He needs to be loved warmly and enjoyed for his appealing qualities.

Anyone who has observed groups of slow children knows how natural and friendly and appealing most of them are—particularly the ones who have been accepted naturally at home. And, when they are busy at play or schoolwork that is right for them, they have the same eager, interested attitude that average and superior children do. In other words the "dumb" look comes more from feeling out of place than from having a low I.Q. Most of us would have a stupid look in an advanced lecture on relativity.

The child who is only mildly or moderately slow is, of course, usually cared for at home. This is the place where he, like the average child, will get the most security. It will be good for him to go to nursery school, if possible, where the teachers can decide whether he should be with his own age or younger children.

502. **The right school placement is vital.** It is wise to get the opinion and guidance of a psychiatrist or psychologist, either privately or through a child-guidance clinic, as soon as it is suspected that a child is slow (Section 338). It is extremely important that he be tested by the time he is 5 or 6 years old, before he enters kindergarten or first grade. He should not get into a class that is beyond him. Every day that he is unable to keep up, his self-confidence will be destroyed a little, and being left back a grade or demoted will hurt him a lot. If he is only slightly slow and the school program is one where every child can contribute according to his ability he may be able to move along with children his own age. But if he is moderately slow, or if the schoolwork is the same for all children in the class, then he should not start first grade until his mental ability is up to it. This may mean waiting one or more years. If there is a kindergarten, it may be wise to wait to start this until the year before he is ready for first grade, so that he won't be disappointed if he does not move on to the grades with his class. On the other hand if the kindergarten itself is very flexible, it may be better for him to plan to be there for 2 years, especially if he has few children to play with at home.

In a large school system there may be special "opportunity" classes for children who are moderately slow. They start in the

special class at the regular age of 6 but will postpone book work for several years, depending on what they are ready for.

If the family have determined in advance, with the help of a psychologist, that a child will need to be in a special class they may be able to move into a neighborhood where such classes exist by the time the child is of school age.

If it is impossible to get the help of a psychologist, discuss the child thoroughly with the teacher or principal, giving her all the facts. If there is any doubt of his readiness, it is better to wait too long than to start too soon.

503. The seriously retarded child. The child who a 1½, for instance, is still unable to sit up, is satisfied to shake a rattle or look at his fingers, shows little interest in people, is a different problem. Being a helpless baby for an unusually long time, he will require much care over a long period, and perhaps leave too little of his mother's attention for older and younger children in the family. There is less chance that he will ever develop to the point where the family can enjoy him or he enjoy the family. It may be better all around if he is cared for in a special home, boarding school, or institution, beginning as soon as his defectiveness is recognized. However, most public institutions do not take these children before they are 5 or more years old. Special private homes cost more than most families can afford.

There is a special type of mental deficiency in the condition called Mongolism. This is a disturbance of bodily as well as mental development. The eyes slant upwards like an Oriental's, the face is flattened, the limbs are relaxed and double-jointed. The tongue may protrude, the ears may be small or otherwise deformed, and the heart may be abnormally formed. The child grows slowly and never reaches full size. His intelligence develops very slowly, and seldom gets far along. Because of their weak physical condition, these children often die young.

It is usually recommended that the woman who has had a Mongolian baby, and has no other children, try to have another baby before too long, particularly if she is young. The chances of her having another Mongolian baby are small. The advice might be different in the case of a woman who already

has a number of children, because the desire for another child is usually less urgent.

If the family can afford to place the Mongolian baby in a special home, it is usually recommended that this be done right after birth. Then the parents will not become too wrapped up in a child who will never develop very far, and they will have more attention to give to their normal children who need it—either the children that they already have or the ones that they should have afterwards. If a public institution is available when the child gets older, placement should be considered then. It will depend on how severely defective the child is. If he is responsive, loved and enjoyed by the family, everyone will be happier if he stays at home. If he merely exists at a level that is hardly human, it is much better for the other children and the parents to have him cared for elsewhere.

ADOPTING A CHILD

504. Both parents should want him very much. A couple should decide to adopt a child only if both of them love children and feel that they just can't get along without them. All children, "own," or adopted, need to feel that they belong to and are loved by both father and mother, deeply and "forever," if they are to grow up secure. It's worse for an adopted child to sense a lack of devotion in one or both parents, because he's not quite so secure to begin with. He knows that he was given up for some reason by his true parents and he may fear secretly that his adopted parents might some day give him up, too. You can see, then, why it's a mistake to adopt when only one parent wants to, or when both parents are thinking of it only for practical reasons, such as to have extra help on the farm, or to have someone to take care of them in their old age. Occasionally a woman who is afraid that she's losing her husband will want to adopt a child with the futile hope that this will hold his love. Reasons like these for adoption are not just unfair to the child. They usually prove to be wrong from the parents' point of view, too. All too often the adopted child who is not deeply loved becomes a serious behavior problem.

It's usually unwise for a single person to adopt a child. This is because boys and girls both need the influence of father and

mother in their upbringing, and because the single person may become too wrapped up in the child.

A couple should not wait until they are too old to adopt a child. They are liable to become too set in their ways. They've dreamed so long of a little girl with golden curls filling the house with song as she goes about her daily tasks that even the best of children turns out to be a rude shock. How old is "too old"? It's not a matter of years alone. It's something to discuss with a child-placing agency.

Parents who have a child of their own who is not very happy or sociable sometimes consider adopting another to keep him company. It's a good idea to talk this over with a children's psychiatrist before deciding. The adopted child is apt to feel like an outsider compared to the "own" child. If the parents lean over backwards to show affection for the newcomer, it may upset rather than help their own child. It's a risky business.

There's sometimes danger, too, in adopting to "replace" a child who has died. If there are other "own" children in the family, an adopted child may feel at a disadvantage. But even if the parents have no other children, they should adopt only because they want *a* child, to love for himself. There is no harm in adopting one who is similar in age and sex and appearance to the child who has died, but the comparison should stop there. It is unfair and unsound to want to make one individual play the part of another. He is bound to fail at the job of being a ghost, and he will disappoint the parents and become unhappy himself. He should not be reminded of what the other child did, or be compared with him out loud or in the parents' minds. Let him be himself. (Some of this applies also to the "own" child who is born after an older one dies.)

505. **Adopt through a good agency.** Probably the most important rule of all about adoption is to arrange it through a first-rate child-placing agency. It is always risky for the adopting parents to deal directly with the true parents, or through an inexperienced third person. It leaves the way open for the true parents to change their minds and to try to get their child back. Even when the law stands in the way of this, the unpleasantness can ruin the happiness of the adopting family and the security of the child. The good agency stands like an impenetrable wall

between the two sets of parents, keeps them from ever knowing each other, keeps them from ever making trouble for each other, and thereby protects the child. The agency helps the "own" mother and relatives to make the right decision in the first place, whether to give the baby up or not. It uses its judgment and experience in deciding which couples should be dissuaded from adopting. The agency in addition watches the child during the probationary period in the new family to make sure that the arrangement is working out well for all concerned. Wise agencies and wise state laws require a probationary period before the adoption becomes final.

At what age should a child be adopted? In a general way, the younger the better. The adopting parents feel that they are starting with a clean slate and can get used to the baby through the same easy stages as if he were their own. The only disadvantage of very young adoption is that it's harder to tell what kind of a child it is going to be. However, plenty of successful adoptions have been made later in childhood.

506. Let him find out naturally. Should an adopted child be told he is adopted? All the experienced people in this field agree that the child should know. He's *sure* to find out sooner or later from someone or other, no matter how carefully the parents think they are keeping the secret. It is practically always a very disturbing experience for a child of any age, or even for an adult, to discover *suddenly* that he is adopted. It may shatter his sense of security for years. Supposing a baby has been adopted during his first year, when should he be told? The news shouldn't be saved for *any* definite age. The parents should, from the beginning, let the fact that he's adopted come openly, but casually, into their conversations with each other, with the child, and with their acquaintances. This creates an atmosphere in which the child can ask questions whenever he is at a stage of development where the subject interests him. He finds out what adoption means bit by bit, as he gains understanding.

Some adopting parents make the mistake of trying to keep the adoption secret, others make the opposite mistake of stressing it too much. If parents are inwardly uneasy about the fact that the child is adopted, and feel that, to be honest, they must

always *stress* the point, the child will begin to wonder, "What's wrong with being adopted anyway?" But if they accept the adoption as naturally as they accept the color of the child's hair, they won't have to make a secret of it, or keep throwing it in his face, either.

Let's say that a child around 3 hears his mother explaining to a new acquaintance that he is adopted, and asks, "What's adopted, Mommy?" She might answer, "A long time ago I wanted to have a little baby boy very much to love and take care of. So I went to a place where there were a lot of babies, and I told the lady, 'I want a little boy with brown hair and brown eyes.' So she brought me a baby and it was you. And I said, 'Oh, this is just exactly the baby that I want. I want to adopt him and take him home to keep forever.' And that's how I adopted you." This makes a good beginning, because it emphasizes the positive side of the adoption, the fact that the mother received just what she wanted. The story will delight him and he'll want to hear it many times.

But somewhere between the ages of 3 and 4, if he is like most children, he will want to know where babies come from in the beginning. The answer is discussed in Section 312. It is best to answer truthfully, but simply enough so that the 3-year-old can understand easily. But when his adopted mother explains that babies grow inside the mother's abdomen, it will make him wonder how this fits in with the story of picking him out from all the other babies at the institution. Maybe then, or months later he'll ask, "Did I grow inside you?" Then the adopting mother can explain, simply and casually, that he grew inside another mother before he was adopted. This is apt to confuse him for a while but he will get it clear later.

Eventually he will raise the more difficult question of why his own mother gave him up. To tell him that his mother didn't want him would shake his confidence in all mothers. Any sort of a made-up reason may bother him later in some unexpected way. Perhaps the best answer and nearest to the truth might be, "I don't know why she couldn't take care of you, but I'm sure she wanted to." During the period when the child is digesting this idea, he needs to be reminded, along with a hug, that he's *always* going to be yours now.

507. He must belong completely. The secret fear that the adopted child may have is that his adopting parents will some day give him up as his true parents did, if they should change their minds, or if he were bad. Adopting parents should always remember this and vow that they will *never* under any circumstances say or hint that the idea has ever crossed their minds of giving him up. One threat uttered in a thoughtless or angry moment might be enough to destroy the child's confidence in them forever. They should be ready to let him know that he is theirs forever at any time the question seems to enter his mind, for instance, when he is talking about his adoption. I'd like to add, though, that it's a mistake for the adopting parents to worry so about the child's security that they overemphasize their talk of loving him. Basically, the thing that gives the adopted child the greatest security is *being* loved, wholeheartedly and naturally.

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